

a_llo
Rotterdam: Garden your city!

a_llot

Rotterdam: Garden your city!

1 **allot** |ə'lä̃t|

verb (-lotted , -lotting) [trans.]

give or apportion (something) to someone as a share or task

2 **lot** |lä̃t|

pronoun (a lot or lots) informal

a large number or amount; a great deal

noun a plot of land assigned for sale or for a particular use

(New Oxford American Dictionary, Mac OS X)

Elsa Sitsen

Master thesis Landscape Architecture, Wageningen University, June 2010

supervision: dr. de Jong, E. and Roncken, P.
extra information: ds+V, Rotterdam and RBvV, Rotterdam



TABLE OF CONTENTS

I Thesis	page 3
Abstract	5
Points of departure	7
1 Social component: The prevailing Zeitgeist	9
2 Spatial components: Rotterdam	11
3 Historical component: Evolution of allotment gardens	15
Conclusions	18
Endnotes	20
List of literature	22
Hypothesis	24
 II Comparison of different garden projects	 page 30
Analysis in images, maps, labels	32
Legend	70
Graph: garden location and plot size	71
Tabel comparison of the projects	72
Conclusions	73
Description in Dutch	74
 III Critical review of garden components	 page 77
 IV Concept and Location of design	 page 128
 VI Design	 page 137
Plan 1:1000 and legend	138
Cross-sections	140
Impressions	144

‘De behoefte aan nuts- of moestuinen wordt groter: vooral allochtonen willen graag een tuintje om er groenten te verbouwen en deze nu al grote bevolkingscategorie zal nog verder groeien.

De behoefte aan sier- en verblijfstuinen zal naar verwachting enigszins afnemen.

Nutstuinen moeten op loop- of fietsafstand van de woningen liggen; voor de sier- en verblijfstuinen, waar men in de regel langer verblijft, is dit minder belangrijk.’

Ruimtelijk Plan Rotterdam 2010, ds+V, 1999, p.24

‘Uit de verschillende onderzoeken blijkt dat het buurtgroen door de Rotterdammers het meest wordt gebruikt.

Zij vinden een **goede kwaliteit van het buurtgroen belangrijker dan het groen in de stad of de regio.**

Tegelijkertijd wordt het buurtgroen op dit moment het minst gewaardeerd.

Het groen in de stad en de regio (de stads- en regioparken) wordt al goed gebruikt en hoger gewaardeerd dan het buurtgroen.

Het aanbod aan groen in de buurt sluit niet aan bij de vraag. Speelpleinen, grasveldjes, speelveldjes, kleine bomen en struiken zijn volgens de Rotterdammers in overvloed aanwezig.

In de buurten is juist behoefte aan meer kleine parkjes (pocketparks), bloemen en kleur, avontuurlijk speelgroen en groene daktuinen.’

‘Tekort aan groen in de binnenstad: In verschillende onderzoeken is aangegeven dat het in de binnenstad nog te veel ontbreekt aan gebruiks- en kijkgroen. **Bij een toenemende woonfunctie in het centrum zal ook de behoefte aan gebruiksgroen toenemen’**

Groenonderzoek 2008, Rotterdam, p.33



Thesis

‘The task of the professional is not to design environments but to enable people to create their own space’

(Crouch, D., Ward, C., p.272)

ABSTRACT

Sitsen, E., 2010. *A_lлот. Rotterdam: garden your city*. Master thesis, Wageningen University.

keywords: allotment garden, community garden, urban gardening, garden, gardening, gardener, public space, Rotterdam, do-it-yourself culture, landscape architecture

This thesis gives attention to the phenomenon of allotment garden - in Dutch: *de volkstuin*, perceived as a garden for everybody – as a tool to tackle the amount of poorly maintained, anonymous public space in Rotterdam. The allotment garden is put into perspective, its evolution - the development and change through time - is studied and discussed in historical and social sense and in particular spatial appearance. The attempt is made to grasp the essence of allotment gardens, including their shortcomings. After that, the contemporary society, the urban condition and peculiarities of Rotterdam are confronted with potentials of such gardens. Both, the traditional allotment garden type and appearance and the understanding of those gardens is first broadened and then imported into contemporary social and urban context. / The term “allotment garden” is stretched to make it suitable for a contemporary inner urban situation which - as a consequence - opens up new possibilities for a city like Rotterdam.

Recently new interest in gardening can be observed, as a form of personal expression and a DIY- attitude of the physically far under-challenged working class of nowadays society.

This given is linked with the problem of a lot poorly maintained, anonymous public space in Rotterdam. In this way, a new type of allotment gardens can be used as a tool to make use of the extent of anonymous public space in Rotterdam, involve the citizens actively in the process of giving form to their city and transfer responsibility to them for their own living environment. A search for balance between the professional input/role of professionals (landscape architects, urban planners, architects) and the inhabitants’ initiative: the (landscape) designer, who creates a certain framework and conditions for the people but also enables the creativity of the users.

Diverse garden projects are analysed and compared in relation to the type, form, size and context – in the field as well as on the map. Then a zoom-in is done and a critical analysis of garden components reveals the building stones of the gardens and categorizes them according to function and shape.

Traditional allotment gardens are located at the city borders, aggregated in autonomous entities. Recent demand however directs towards gardens close to peoples homes. An introduction of allotment gardens in the middle of the city

requires a different allocation and design. A linkage with the urban context of the gardens should be provided and they should be accessible for both, gardeners and non-gardeners. According to analysed garden projects one can say the more the gardens are located in the city centre, the smaller the plots are. Where in the past an average garden plot was approximately 200m², a recent example of urban garden plots cover only an area of 30m². People do not need to completely supply themselves with food from that garden, but gardening today is more an extra for leisure aims and to live out creativity.

The resulting design assignment asks at one hand for a general concept for new allotment gardens on neglected public spaces in cities and on the other hand for an exemplary work out of one strategic location in Rotterdam.



POINTS OF DEPARTURE

CONTEXT, OUTLINE

This thesis aims to discuss possibilities for implementations of a new form of allotment gardens in the city of Rotterdam. It works out the spatial structure of the city Rotterdam in connection to the phenomenon of the allotment garden and aims at bringing these two studies together in opening up new possibilities for a contemporary form of allotment gardens in Rotterdam, the *volkstuin*+

STRUCTURE OF THE TEXT

The goal of this essay is to give a landscape-perspective on today's Dutch city. The text is structured as follows. In the first chapter, one finds a general view on allotment gardening and the do-it-yourself (DIY) as a prevailing Zeitgeist in general and in particular of Rotterdam. Next, the reader can find the urban condition of Rotterdam elaborated upon historical aspects of Rotterdam's gardens and landscapes, the urban structure, its peculiarities, positive points and problems. In the third chapter the phenomenon of the allotment is put into perspective. The development and change of allotment gardens is discussed. Their essence is defined including their shortcomings. Contemporary society and the urban environment of Rotterdam are confronted with potentials for such gardens. In the end concluding statements are made and a hypothesis is put forward which will serve as conditions for the design assignment.

The givens of Rotterdam are combined with a general view on allotment gardening as and the do-it-yourself (DIY) as a prevailing Zeitgeist in general and in particular of Rotterdam.





1 SOCIAL COMPONENT: THE PREVAILING ZEITGEIST¹

attitude, intentions, mood, interest and focus of contemporary society²

DO IT YOURSELF

The German newspaper Frankfurter Allgemeine Sonntagszeitung wrote recently: ‘In times of crises “Do it yourself” (DIY) is the new luxury. What counts is individuality and not commodity/bulk goods; (...) DIY is trend. Some even see it as a new economic order.’³

Where “do it yourself” can be seen as a new Zeitgeist, an attitude of the present society, there is also spoken about a longing for farmer’s idyll, a popular nostalgia for the earth. Not only the older generation experiences this feeling but also more and more younger people consider traditional way of living (folkways)⁴. Their motivation is individuality or uniqueness, rather than necessity. They have enough money to buy their vegetables or their clothes but a younger generation is striving for individuality and the pleasure of doing things by themselves. Sometimes ideological reasons are the motivation for DIY. They disapprove mass consumption and the monopoly of big firms and brands. Besides that people yearn for “practical things, something that one can tackle and one can get under control”⁵. Our society has changed over decades. People are striving for their personal goals and want to live their individual freedom. Within this context traditional urbanism does not meet society’s requirements anymore. In the way that it is based on top-down planning. It is difficult to fit such a society, that is based on individualism, into a readymade, very constrained urbanism. One should rather find solutions where people are involved into the planning process or get the space to adapt or use systems in the way they want it.

Allotment gardens are such terrains where people can live out their zest for action and enjoy life. There, they can occupy semi-public space and – to a certain extent – do what they want. On the allotment, people are linked with nature and feel themselves grounded. The allotment ‘provides an escape that the town park and other open spaces cannot deliver’.⁶ Just having a quick view on the recent media, one can state with the BBC 2009 that: ‘Allotments, once considered unfashionable, are now all the rage.’⁷

In 2008, the society of German garden friends reports ‘generation golf rediscovers the garden’, the average age in German allotment associations had decreased by 10 years within short time. Almost half of the plots that were leased since the year 2000 is farmed by young families with children.⁸ In the Netherlands allotment gardens have decreased in area with 16% over the past ten years (in the periode from 1993-2003) while the demand for allotments has increased.

The Dutch VROM-minister Cramer urges: ‘Gardening together should be considered as an important activity’⁹ Four million Euros are made available for

realization of new allotment gardens or extensions of existing terrains, initiated by the Tweede Kamer (house of representatives, Dutch Parliament).

There has been a considerable change from fruit and vegetable or utility garden (*nutstuin*) to pleasure gardens (*recreatieve tuin*) according to changing values, norms and demands within the society. The pleasure garden complexes resemble more widespread bungalow parks than traditional allotments. For long, allotment complexes have been burdened with a bad taste for many people. The allotment has been rated the wrong way, as a garden for the lower classes. Now, the view of the citizen on allotment gardens has changed, all kind of people from different social classes and with diverse cultural backgrounds appreciate these gardens in the city. That casts a different light on history.

Unlike expectations concerning pleasure gardens, the Ruimtelijk Plan Rotterdam 2010 mentions that „the demand for utility or vegetable gardens is increasing: especially non-Dutch citizens want a garden to cultivate vegetables and this category of population is still growing.“ A condition for utility gardens is that they are “situated within walking distance to people’s houses or apartments”¹⁰.

Allotments can offer great prospects for the contemporary city - as spaces of the citizens: a ‘*peopled landscape*’ (Viljoen, A., 2005, p.127), green, vibrant and productive. Serving as gardens, meeting places, playgrounds and park-like walking structures. ‘Allotment landscapes offer one means of making high density urban living both humanely tolerable and compatible with the achievement of sustainable cities, environmentally, culturally and socially.’ (Viljoen, A., 2005, p.128)

ROTTERDAM’S CONSTELLATION OF INHABITANTS

Rotterdam has a complex constellation of inhabitants, in the sense of social background (class), provenance (allochtone and autochtone), income brackets and political preference. **That creates a very peculiar atmosphere/tone in the city and identity of the city; it has to do with cosmopolitanism, variegation, colourfulness.** Almost half of the citizens are foreigners. Many of them came in the sixties as immigrants to Rotterdam to work for almost nothing. Now, 173 nationalities are living in the city, of them mostly Turkish (2,1%), Moroccan (1,3%), Portuguese, German, Polish, Spanish, British, Surinamese, Bulgarian Cape Verdeans.

Regardless social background there is a shared interest in a piece of earth: people are longing for a piece of ground and have new interest in gardening. Especially the immigrants from Africa, Latin America and Asia are still used to - vegetable - gardening. In the allotment they can grow specific vegetables from their country and they get the chance for better social integration. ‘Nowadays foreigners apply



for an allotment garden. In nine of ten cases foreigners lay out a vegetable garden and return, by doing so, back to the origin of the allotment.’¹¹

Allotment gardens have always been linked to a **strong social importance**: „Nowadays allotments provide one of the ways in which people relate to each other, free from material pressures and indications of status. ’On the plot you’re just another gardener.”(Crouch, D. and Ward, C. p.267) The ‘informal’ surroundings and the basic activity of gardening seems to make disappear all ‘formal’ and social constraints. The allotment environment drops everything that allows a determination of their social and economical class or status that people normally find themselves in. On the allotment everybody is the same. This equality between people creates a feeling of comfortableness. ’There is a common identity that goes beyond class and income barriers, based on old local cultures, among people with shared interest...’(Crouch, D. and Ward, C. p.269)¹². Reason to listen to minister Cramer, who advises: ‘Gardening together (...) as an important activity’.

The Dutch urbanist, Pieter Verhagen (1882-1950) who lived and worked in Rotterdam had a special view on urban planning for this time. A devotee and lover of nature and landscape ‘Verhagen did not use a ‘tabula rasa’ concept, but translated the essential values of (urban) landscapes and the European tradition of urban and landscape design in new spatial and strategic compositions.’¹³ , ‘He combined the creative aspects of gardening with his observations on the countryside in designs for neighbourhoods, towns and regions. His designs were spatial compositions in which the starting point for the new addition was provided by the existing landscape.’

With his way of doing urban planning and design, he was a pioneer and his work and special view is still important for the contemporary city. His opinion has neither lost any importance nor strength.

“Gardening is the purest of human pleasures.”
(Francis Bacon)

THE PROCESS OF GARDENING.

“The love for his garden is natural/inherent to everybody.’ we can say. (...) The question is if the gardener gets the chance to develop himself. (...) The concentration in accumulation of people in the cities give just few opportunities for real gardening, unless the allotment gardens in the periphery.’ (Verhagen, P., 2004. p.24) To garden implicates care, responsibility, nurture, time, work. While preparing the soil, seeding, planting, seeing things grow and finally harvesting, the

gardener gets conscious about processes of nature. ‘In the garden, we experience nature life absorbing (enjoying, passively), but there this all is increased/boosted through our participation.’ (Verhagen, P., 2004. p.36)

It makes people aware of time and let them experience the seasons. Gardening as activity bounds the gardener to his ground. A feeling of connection with the ground is something that is clearly missing in Rotterdam. Living – often far away from their home country- in high-rise buildings, people are literally detached from their roots, not rooted to the soil anymore. Where in history people were very down-to-earth in Rotterdam, this feature is not valid for most of the current inhabitants. They are disconnected from their roots, from their traditions, cultures and home(land). Gardening can be an instrument to let people root in their city again and recover a feeling of belonging to the city or being home, by giving each a personal contribution in shaping the city. It can help in creating a new identity for Rotterdam.

‘Our human urge to design/to create involves the garden in our environment.’ (Verhagen, P., 2004. p.36)

THE TOPICALITY OF GARDENING

is measurable according to magnitude of 1 ‘wachlijsten’ for allotment gardens, 2 presence in the media: garden blogs, tv shows, magazines; 3 availability of garden articles in shops; 4 occurrence of self-organisations like Guerilla Gardening.... people rediscover the garden. they love growing plants/crops by themselves as an activity, but also because they – by doing so – know what they get and what they eat. Concerning the amount of garden magazines (that survives or even make very good selling), the growth of allotment gardeners, taking place and numbers of visitors of garden fairs (or similar like BUGA) and projects like *offene Gartenporten* in Germany or an equivalent in the Netherlands and Britain it is obvious that interest in gardening is back.

‘After WW II we threw away our vegetable gardens! Now people get aware of needing them again and want them back’, so C. Loidl-Reich¹⁴, professor landscape architecture TU Berlin.

‘De liefde tot zijn tuin is ieder aangeboren,’mogen we zeggen. (...) De vraag is maar of de tuinmankiem kans krijgt zich te ontwikkelen. (..) De concentratie in opeenstapeling van de mensen in de steden laten nog maar aan enkelen gelegenheid tot echt tuinieren, de volkstuintjes aan de periferie niet te na gesproken.’ (Verhagen, P., 2004. p.24)

‘In de tuin beleven wij het natuurleven even absorberend (genietend, passief), maar daar wordt dit alles nog gepotentiëerd door onze medeactiviteit.’ (Verhagen, P., 2004. p.36)

‘Onze menselijke drang naar vormgeving betreft de tuin in ons milieu.’ (Verhagen, P., 2004. p.36)

garden [gärdn]
verb cultivate or work in a garden.

gardener [ˈgärdnər]
noun a person who tends and cultivates a garden as a pastime or for a living
(New Oxford American Dictionary)

‘the garden as a cultural possibility’

‘de tuin als culturele mogelijkheid’ (Verhagen, P., 2004. p.35)

‘In any case, the gardener can lose himself in his garden, dig thoroughly, with the pleasant idea, by doing so, of contributing in – not only the benefit of his own brotherhood but who knows to contribute even in the cultural rise/uplift of a much bigger community.’

‘In ieder geval kan de tuinman zich dus verdiepen in zijn tuin, naarstig doorploeteren, in het aangename besef daarbij iets bij te dragen niet alleen tot het heil van zijn eigen broederschap maar wie weet ook tot de culturele verhef van een veel grotere gemeenschap.’ (Verhagen, P., 2004. p.94)

‘Want voor ons ligt die culturele mogelijkheid niet in het aanschouwen zonder meer, in een passief ondergaan, maar is zij alleen denkbaar als activiteit, gaat zij uit van onze drang iets te doen, te weten en vooral te maken.’ (Verhagen, P., 2004. p.36)

‘Daarnaast is iedereen vrij, of eigenlijk niet vrij maar verplicht, zijn eigen tuin naar eigen aard en zin in te richten.’ p.47

‘What is essential however, is that there be inclusion of the gardeners themselves in the design process, for both inherited allotment spaces, so that the outcome is compatible with the sense of ownership and design, and of site and plots.’ (Viljoen, A., 2005. p.131)

URBANITY OF ROTTERDAM: QUALITIES AND PECULIARITIES OF THE CITY

‘Rotterdam is a city that makes no demands. It is the average destroyed and reconstructed post-World War II European city, its attractions emptiness, neutrality, a work ethic, and the absence of history, pretention, “interest”, temptation.’¹⁵ Rotterdam was founded in the 13th century at the dam across the small river, the Rotte. In the 16th and 17th century the city flourished with trading, namely of agricultural products (cereals) and wool¹⁶. Its identity used to be determined a long time by the harbour that moved out of the city towards the sea in the eighties of last century and left ‘fresh voids in the newly reconstructed city’¹⁷. Rotterdam nowadays has a lot of urban problems and is seeking for a new identity. Compared to other big cities in the Netherlands as for example Amsterdam or Utrecht, Rotterdam differs first in the way it is situated at the mighty river, the Meuse, that divides the city in two parts, North and South. Secondly, it is special with respect to the urban structure, the destruction during the war and the shift of the harbour out of the city, resulting in a loose/porous structure with plenty of space. In comparison there is no like expanse and openness in another Dutch city than in Rotterdam. What might be a peculiarity is at the same time a problem. The surplus of open space is often poorly maintained, has no allure and makes people not feel comfortable. There is need to search for solutions to strengthen the potentials of the city and turn disadvantages into advantages!

CASE ROTTERDAM: SURPLUS VERSUS REMINDER OF SPACE

Rotterdam has a surplus of public space, as is indicated by the study “Wegen, afWegen”¹⁸. Primarily the post-war districts (build in between 1945-’70) of the city, where apartment buildings are placed in open space, have vast excess of public space: there is an average of 126 m2 public space per inhabitant. Because the maintenance of this amount of open space is connected with great expenses for the municipality. And because there is no money, the space is kept very low in maintenance, economically designed with cheap materials. As result space has few amenity values for the citizens. The consequence is unattractive public spaces where people do not want to stay, to meet or to recreate. The existing public space in Rotterdam for the most part looks lifeless, dingy, unpleasant, tacky - what contrasts strongly with Rotterdam’s population that is extremely colourful and varied. To involve the citizens in the design and responsibility for Rotterdam’s open space could mean a considerably change in the situation and could offer new opportunities.

In 2001/2002 ‘Stichting AiR’ and the NAI took the initiative to discuss and think about use and purpose of the green spaces of Rotterdam. The publication ‘De openbare stadstuin’ (the public city garden) displays the urgency of this topic. ‘Except the Kralingse Bos, the Park aan de Maas and the Zuiderpark, one can qualify the majority of green space of Rotterdam as uniform space with few expressivity, low living – and residential quality. The quality, accessibility, appeal and recognisability of the urban greenery could be much better and more differentiated/ sophisticated.’ (Brinkman, E., 2002. p.9)¹⁹

In the districts build in 1945-1970, the portion public green - including parks, green, cemeteries, sport terrain, allotments - is 75 m2/inhabitant, that is 150 m2 per household (with an average of 2 persons) compared to <10 m2/inh in the districts build in 1870-1920. The recommended square metres of public green per household by the Dutch ministry VROM is 75m2, that means Rotterdam is high above the indicated benchmark. This amount of green space results in high costs for the city. To save money, it is largely extensive or low maintained and poor materialised.

‘The municipality of Rotterdam is on paper the greenest municipality of the Netherlands but Rotterdam’s inhabitants do not experience it like that’.

Politician Lucas Bolsius (Outdoor space) wants to change this image and aims to make green in the city more visible and accessible. Besides that, according to him, a better distribution of green is needed²⁰. Especially in the post-war districts of the city, the green public space of Rotterdam is designed according to quantitative norms rather than according to quality, program, use or demand:

‘What remains is plenty of green space without identity and with restricted practical - or use value for the inhabitants. (Goossens, T. p.36) ²¹

Additionally, ‘there is a lot of tension between intensity of use, ecological potentials, design, management and maintenance. The older districts of Rotterdam have a shortage of green outdoor space, as well in the immediate surrounding of houses, per block, as per neighbourhood and per district.’²²

The proportion of ‘general green space’ from the total green public space is 35% - that means space that has no clear definition in contrast to a park, sport terrain or others. Allotments occupy just 5% of the total public green space or just 2,6% of the total public space of the city. Parks take up 18% of the total public space of the city.



Slinge, Pendrecht



Ploegstraat, Bloemhof



Hooidrift, Nwe Westen



area total	area buildings	area no buildings	public area total	parcel unbuilt
11055 ha	1305 ha	9750 ha	5629 ha	4121 ha
100%	12%	88%	>50%	37%

public area	allotments	sport parks	parks	cemetries	pavement	other green
ha	147 ha	474 ha	997 ha	82 ha	1966 ha	932 ha
% of public	<3%	8,5%	18%	1,5%	35%	16,5%

Goossens, T., 2002. *Wegen, afWegen: kwantitatieve berekening van het openbare ruimtegebruik in Rotterdam*. Wageningen: Wageningen Universiteit.



anonymous spaces linked to urban typology :
waterside, empty building plots, modern neighbourhoods in Zuid, oversized parks, uniform public green!

In general there is too much public space in Rotterdam, more precisely and focused on public green space, there is rather an imbalance of city greenery: whereas in the post-war districts there is too much, the city centre has a deficit of greenery²³. In the context of a debate about the future of Rotterdam, the Canadian urban planner Larry Beasley incited the city to hurry up with urban renewal. Beasley, who already succeeded in transforming Vancouver from an unattractive harbour city into a vibrant metropolis, advised for much more green in the paved inner-city.²⁴ (Hoogstad, M., 2009.)

Rotterdam manifests more spatial problems that influence the city's appeal. The city has serious identity problems and cannot offer high quality living environments. Consequences are that people move out of the city or do not wish to move to Rotterdam. People, who are living there cannot identify with the place and are not appreciating their environment. This is linked to the absence of a feeling of responsibility for the neighbourhood or more extreme the development of frustration and aggression. Resulting in a dilemma. What does the city stand for? It was the labour city, the city of harbour worker. Amsterdam for example is well-known as the capital of the Netherlands and directly linked to an image of the very recognisable structure of the canals (grachten) the historical core of the city. Rotterdam has nothing comparable, it does not even have a real centre. What makes Rotterdam is its situation at the immense river, the Meuse, the untypical abundance of high-rise buildings for a Dutch city and the city's characteristic to have multiple cores (each district has its own centre) instead of one centre. Considerable is also, that the entire city is sectioned by giant infrastructure with the consequence of strange cut-off places that the Rotterdam based urbanist Palmboom calls the 'shadow-city'²⁵ (schaduwstad).

Considering the debates and symposia of the last ten years amongst urban planners, (landscape) architects and designers – such as the project 'de openbare stadstuin' mentioned above - one can observe that all of these touch questions about public and private, about the bad condition of the public spaces or the imbalance of open public space within the city, and the missing identity of Rotterdam. This underlines the urgency of this theme. In a city that seems to be dominated by urban planners and architects: **there is a green perspective needed!** This has been said several times before, but has not worked out yet.

On the one hand, there is a surplus of public space and on the other hand it is not equally distributed. To solve the problem of an excess of unattractive public space, parts of the public space could be allotted at collective or private property or responsibility. Instead of the municipality this property would then be responsible for maintenance and accessibility of these spaces. Such models exists: think of park Frankendael in Amsterdam, where a restaurant 'De kas' serves on location grown vegetables, school garden projects, or projects of Creatief Beheer

Rotterdam, a group of people that realize together with inhabitants temporary gardens on wastelands in the city.

According to Jane Jacobs there are three levels of existence on which urban dwellers operate: 'the level of daily interaction within the immediate neighbourhood, the street, or block; the level of the district or locality; the level of the entire city.' (Jane Jacobs 1961). 'Community gardens are focal points²⁶ that help to weave together these three levels of existence' (Von Hassel, M., 2002. p.3)²⁷ By starting with investigations on the lowest level one could at the end reach a change for the entire city.



Along beanpoles to the foundation of a state: the government district, Bonn, 23 may 1949. Photography: Ullstein Bilderdienst.

3 HISTORICAL COMPONENT: EVOLUTION OF ALLOTMENTS

definition in general, different forms, etymology, different origins in various countries

- special case/situation of development of allotments in Rotterdam
development from
- the laanorganisaties 17th century for the bourgeoisie
 - gardens for the working class: vegetable garden, utilitarian character, surviving and feeding one family
 - allotment gardens as organisation + answers to urban, industrial issues
 - war-gardens (England, USA), importance of allotments after war, common good, important to re-built the city and support the people
 - shift from allotment/functional use to leisure gardens, gardens become larger, get a house and a lawn, no production purpose anymore, legal residence from May-October, bigger accumulations/conglomerations in ‘garden parks’ that do not have a direct link/connection with the neighbourhood, that are closed/independent entities;
 - and a new trend backwards, to vegetable gardens/allotment gardens!
- > continuing move of the gardens to the ever-changing city borders
> changing character/use
> changing owners/public/users
> continuity and change persistent/stable aspects and changing ones
> qualities and problems

THE PHENOMENON OF ALLOTMENT GARDEN

Allotment gardens are phenomena that exist in every (European) city.
‘Allotment gardens virtually are a world-wide phenomenon. You can find them in China, India, Japan, the Philippines, Russia, Africa, North and South America, and Europe.’²⁸ (Gröning, G., 1995) Where allotment gardens in developing countries, like Colombia, Vietnam, Peru, are existing because of pure necessity, the ones in Europe the purpose have shifted to leisure. In first mentioned countries the allotments are reason of peoples existence/survival. Developed at the end of the 18th century, first as gardens for the poor people to grow vegetables for personal needs, allotment gardens have a rich history that differs in every country. With the industrialisation at the end of the 19th century, living conditions in cities degraded. ‘However, because of industrialization, many cities in Europe faced a considerable reduction in open spaces in those quarters which were built up to house people who migrated to the cities from rural areas.’(Gröning, G., 2007, p.115) In Germany

allotment colonies were regarded as a serious design task, one who concentrated on precisely that task was the German landscape architect Leberecht Migge²⁹ who tried to standardize garden elements. The idea of the importance of allotments was increasing.
In England ‘the need for allotments was recognized in law, with the passing of an Act of Parliament in 1887 obliging all local authorities to provide allotments’ (Patrick Taylor, 2006, p.) In the periods of the two world wars allotments again played an important role in supplying the population of food. From the ‘50s on this utilitarian aspect of allotments started to change to more pleasure oriented/ recreational use of the gardens. In Berlin, people were allowed to live in allotments during and after the war. ‘A fundamental precondition for residence and activity in the garden was the (summer)house or hut, the ‘Laube’. It developed from the shed, that was a place for keeping tools and a shelter for the gardeners when it rained. In Berlin the house functioned often as a compensation for conventional housing.’³⁰ (Sahn, K., 2001) Today by law, this is not any more allowed but it could open new perspectives for the leisure gardens. ‘Late in the 20th century ecological anxieties, and the quality of mass-produced fruit and vegetables, encouraged a new wave of interest, often among organic gardeners.’³¹

DEFINITION

‘Allotments are the English manifestation of an international movement, widespread in Europe (see Kleingärten), of gardens not attached to houses to provide space for urban dwellers to grow vegetables and fruit or to have small pleasure gardens.’³² (Taylor, 2006) Called allotment in England, volkstuin in the Netherlands, Schrebergarten or Kleingarten in Germany, jardin familial/portager/ ouvrier in France or orti communi in Italy their etymology is interesting. An ‘allotment’ is ‘a plot of land rented by an individual from a local authority, for growing vegetables or flowers.’ (Compact Oxford English Dictionary) To allot means to give or apportion something to someone. This puts emphasis on the collective nature of allotments. People share a bigger area, where everyone has a personal plot for gardening purpose. They are not only obligated to maintain their own garden but also the shared/ collective structure as paths, hedges and more.

ETYMOLOGY, *different origins in various countries: allotment, Kleingarten, volkstuin, jardin familial*

In Germany, the ‘Schrebergärten’³³ were named after doctor Schreber, who campaigned for more exercising of children outside. ‘The Leipzig physician D. G. M. Schreber (1808-61), (...) had the idea of creating playgrounds for children and small gardens for adult part-time gardeners set within a common plot.’³⁴ The word Kleingarten indicates a small size of the gardens. In France, different terms for the allotment refer to different goals and different kind of gardeners or users. The jardin ouvrier (workers garden) evolved in times of the industrialisation. Allotment gardens were given to the workers of the factories. Most of them came from the countryside and were used to grow their own vegetables. In 1896 Abbé Lemire founded the ‘ligue du coin de terre et du foyer’ and advanced the allotment gardening in France.³⁵ The term jardins familiaux, also used for allotments in France, marks its use by families, while jardin potager defines a vegetable garden. The Dutch word ‘volkstuin’ emphasises that it is a garden for the folk, for everybody. Also called ‘arbeiderstuin’, formerly it was especially alluding to the lower classes, the workers. The ‘volkstuin’ is ‘a small piece of land, outside or at the borders of the city, where city dwellers cultivate edible and ornamental plants’³⁶ (Van Dale). The Kramer’s dictionary says about „volkstuintje“: ‘a piece of land that is let to townsman to grow potatoes, vegetables and more.’³⁷ One description implicates a productive use of the land only (vegetable garden) the other description allows utility as well as ornamental use of the gardens. Per definition it is clearly related to the urban environment and the city’s dweller/citizen. Where in the past the gardens were meant for the poor and unemployed, for workers, currently all social classes enjoy gardening. One refers to this development as “verjupping” of the allotment. It is obvious that ‘The allotment is popular’³⁸.

‘De volkstuin is hip.’

ORGANISATION OF ALLOTMENTS, INTERNAL

Roughly, one can distinguish two types of allotment gardens. The allotment garden as vegetable or utility garden and the recreational/leisure or pleasure garden (in Dutch these two are called nuts- and verblijfstuin). In Germany the linguistic differentiation is made in Klein- and Wohngarten. Next to these two explicit defined types there are mixed versions. Allotment – and pleasure gardens are normally accumulated in ‘garden units’, tuincomplexen or tuinparken. Each of these units

is managed by a garden association, volkstuinvereniging that controls the gardens and behaviour of gardeners by a set of rules. One becomes automatically member of such an association when one owns a garden in a unit, and that means that one also has to take part in common maintenance activities as well as social activities.

COLONY CULTURE

Allotment complexes are often described as garden colonies. A colony is normally ‘a country or area under the full or partial political control of another country, typically a distant one, and occupied by settlers from that country’ or ‘a place where a group of people with similar interests live together’. That way, the term refers to something closed, a certain land belonging to an owner or a closed circle of people. The term has his origins in Latin: colonia means ‘settlement, farm,’ from colonus ‘settler, farmer,’ from colere ‘cultivate.’, the term culture has the same origin. Rotterdam cultivates a nice heritage of allotment and leisure complexes supported by the general attitude of the inhabitants, the labour ethic and should preserve this culture!

Noticeable in Rotterdam is a labour ethic that is in line with the history of the harbour labourers that had to work hard while they have been low paid. It was about action, getting things done rather than talking.

‘While elsewhere in the Netherlands this labour ethics³⁹ has disappeared, it has pretty much been conserved at this place, because, as mentioned, the idea is embedded in the rules of the garden unions, which have the power to exclude people who do not have the same attitude.’ (Jacobs, M., 2006)

This construction had the effect that allotment unions became self-regulating systems with a certain miniature society within its defined borders. In this way the unions are clearly separated from their surroundings. They work as closed entities, that have few interaction with their urban context and other urban activities.

COMMUNITY GARDENS

Compared to the allotment garden, the American community garden is a piece of land shared by several gardeners that work on one garden together. The principle is completely different. People rather choose for the social activity and a sense of community than for a private place or the realisation of personal ideas. The background of the community garden and the allotment is similar. Both were founded on grounds that had little value. Allotment gardens were an option to still exploit the grounds in a way, also temporarily before building development. That was more intelligent than doing nothing and keeping them as brown fields with no yield at all. The allotments were located at the city borders while the community gardens often on waste lands in the inner-city. The initiatives for both gardens have significantly different origins. Allotments were granted by central institutions or big landowners such as factory-owners, the church or the municipality, the city. Community gardens were appropriated by the gardeners themselves. They were an answer to urban problems or bad urban planning that showed the power of individuals and the energy of informality. Community gardening was an early form of Guerrilla gardening that is done all over our continent and in America now. But there is a difference in relation to urban issues and urban fabric:

‘Guerrilla gardening, a movement that can be traced back to Johnny Appleseed, is springing up in areas of urban sprawl as citizens scatter seeds in vacant lots and abandoned sidewalks to make their neighbourhoods greener’ (one world.net)

‘Guerrilla gardening is political gardening, a form of direct action, primarily practiced by environmentalists. It is related to land rights, land reform, and permaculture. Activists take over (“squat”) an abandoned piece of land which they do not own to grow crops or plants. Guerrilla gardeners believe in re-considering land ownership in order to reclaim land from perceived neglect or misuse and assign a new purpose to it.’ (Wikipedia)

‘The received opinion is that if you want to be a gardener then you must do so in your own garden or else find a way to be employed or permitted to garden someone else’s land. But some people have a different definition of gardening. I am one of them. I do not wait for permission to become a gardener but dig wherever I see horticultural potential. I do not just tend existing gardens but create them from neglected space. I, and thousands

of people like me, step out from home to garden land we do not own. We see opportunities all around us. Vacant lots flourish as urban oases, roadside verges dazzle with flowers, and crops are harvested from land that was assumed to be fruitless. In all their forms these have become known as guerrilla gardens.’⁴⁰

There are now about 750 community gardens in the total area of New York city. The first gardens evolved in the 1970s with the goal to create new recreational areas in neglected quarters and the opportunity to grow fruits and vegetables. Average duration of use come to 9 years, some gardens up to 30 years. Initiators are self organized neighbourhood groups but as the gardens are open for public, they are used by local citizens, count 10-20 members for one garden and at the same time 10-1000 visitors per garden. The city owns and allots the ground, the gardens are legal or partly just tolerated. Already during the depression there were utility gardens in New York, in times of World War II victory gardens were developed but in the 1970s when the tax crisis led to urban decay/decline and people feared that the inbuilt lots were magnets for drugs, prostitution and crime, for the first time users themselves developed self organized gardens, for the first time users themselves developed self organized gardens. Citizens and artist cleaned up wastelands and turned them into gardens, first of the Lower East Side in Manhattan and later in all other five districts of the city. Because of this boom the operation Green thumb was founded, that allotted the grounds for 1 dollar a year to the people, provided that they recognized that the ground is not their own but that it is property of the city.⁴¹

SITUATION AND DEVELOPMENT OF ALLOTMENTS IN THE NETHERLANDS

The first gardens for the folk, the working people evolved in the Netherlands related to growing cities during the Golden Age (Gouden Eeuw, roughly the 17th century). That were the so called ‘coolghaerden’ (read: cabbage gardens). Before gardens were reserved for the elite, the nobility and churchmen. The role of the city! urban space, city structure/building structure, garden+ public/private, garden as part of the city from the very beginning! In the same century, in Rotterdam there were ‘laanorganisaties, or avenue organizations, which acquired land along the avenues leading from the city in order to rent out plots to individuals’⁴² and where next to vegetables also ornamental plants were grown. In the 19th century ‘De

Maatschappij tot Nut van het Algemeen' (a society for public interest) provides workers gardens 'arbeiderstuinen' with the goal to support workers and their family. 'Volkstuinen' as we know them today, first emerged in Rotterdam in the twenties, a century ago.⁴³ 1919 the association of allotment gardens in Amsterdam 'De Bond van Volkstuinders' was initiated. Nine years later, 1928 the national association of allotment gardeners (AVVN, Algemene Verbond van Volkstuinders Vereniging, Nederland) was founded. In Rotterdam, quite late, the RBvV (De Rotterdamse Bond van Volkstuinders) was founded in 1942 with the goals to stimulate gardening in general and especially natural gardening. It functions as a representative for the gardeners, that assumes responsibility for and promotes its members' interests.⁴⁴

CONCLUSIONS

PAST. PRESENT. FUTURE.

Allotment gardens have been an important component for cities since long. 'The low status allotment plays maybe the most important role in the democratisation of our garden culture.'⁴⁵ (de Jong, E., p.26) A form of garden that was from its origins available for lower classes of the society, for the small man. Whereas gardens before were belonging to the upper-classes, the nobility. There was a parallel culture of country houses and gardens of the upper class on the one hand and the small city gardens of the small men on the other hand.

Allotment gardens often have to give way to new city development, new housing and office buildings. As a consequence they are mainly located at the city borders.

*'But the citizens wish for gardens close to their homes.'*⁴⁶ (Vries, de, S., Schöne, M.B., 2004, p.28)

Located far away from urban activity centres and too far from peoples homes allotments have few interaction and connection with other urban activities. An improvement in this direction would, however, extend the social basis and support for the gardens. The old model of allotment unions and associations does not fit within peoples attitude today. Young people strive for more freedom concerning the appearance and use of their allotment. 'There is the inevitability to keep pace with social developments, if one does not so, one will be rejected.' (Adema, H., 2009) The direction of demand concerning the allotment type has changed. Expectations are that vegetable gardens in central places in the city, close to peoples homes are wanted. Because of a change and broadening of user group, the gardens, garden parks and garden models need to be adjusted and its variation has to increase. New gardeners have another notion of how their garden has to look like, they have also different motivations when getting a garden then the allotment gardeners form former times. The young generation do not want to be member of an association/garden union and different cultural backgrounds conflicts with rules and convictions of the association. For that reason, a new form of organisation would be needed, that leaves space open for personal interpretation. Allotments can take part in making Rotterdam an attractive city with an own and distinct identity.

For some a blight on the city map, the big allotment garden parks or complexes that frame the inner city of Rotterdam have slightly negative overtones. But 'the allotment also provides an escape that the town park and other open spaces cannot deliver. However designed for informality, the park remains for recreation and is not a producing landscape where people can grow, create and adapt their own





ground, producing the landscapes themselves.’ (Viljoen, A., 2005, p.127/128)

Rotterdam is surrounded by a shell of highways, rails, (harbour-)industry and a high scale green structure that is composed of graveyards, bigger recreation areas like the Kralingse plas or the zoo Blijdorp, sport terrains and leisure garden complexes. Most of Rotterdam’s allotment complexes are part of this shell. Those are bigger entities that seem to be predominantly autonomous. An average of 300 gardens are fenced and even though the complexes are accessible from sunrise until sunset, they do not look inviting. Citizens who do not own a garden there - visitors - often feel scruples to enter the complex. Allotments in the inner city are absent, but were wishfull.

‘Allotment landscapes offer one means of making high density urban living both humanely tolerable and compatible with the achievement of sustainable cities, environmentally, culturally and socially.’ (Viljoen, A. (ed). 2005, p.128)

VOLKSTUIN+

one could think of a concept of the volkstuin+; with a strong framework that can survive the filling-in/content and that has a long-term meaning for the city. It should link different scale levels, human scale, more spread, open and smaller community gardens in the inner-city, directly linked to other functions as living, markets, schools, restaurants etc, offers new possibilities and perspectives for the city, turns the uninspiring, dead rest-grounds in the city into vibrant places, to meeting places (for the hundreds of cultures that the city counts)!

What finds entry in other cities like Detroit, Paris, London etc. as guerrilla gardening could be implemented in Rotterdam as a more organised, more durable system/structure with longevity by embracing growth and change of the filling-in and by intelligent linkages with other urban activities.

Guerrilla gardening is initiated by people themselves, they gather, find potential spaces like wastelands or verges and saw plants there, with the aim to improve the (visual) quality of these spaces. In contrary to the guerrilla concept that concerns random spaces and are temporary or interim, the question for Rotterdam should be how to build up an organised, durable but flexible garden-/allotment-system that leaves space for growth and change. Such a solution would make the city flourish.

Concerning the volkstuin+, Rotterdam needs an instance/authority/agency that provides as well basic needs for the gardens as lay out/construct a general framework of pathways, trees, ditches, sanitation. In New York such an organisation, called Green Thumb, supports the 600 existing community gardens with seeds, tools and workshops⁴⁷. Their aim ‘is to foster civic participation and encourage neighbourhood revitalization while preserving open space. Community gardens provide green space and easily accessible recreational opportunities in the areas that need them most.’ In Germany or Austria exist self-help organisations/cooperative societies, the so-called *Wohngenossenschaften*, that offers good and affordable houses and apartments to their members under certain conditions and a set of rules. That could be thinkable of gardens, too. Or the cooperative society for apartments enlarges their responsibility and cares also for the management of the common gardens, or independent garden cooperation’s could be founded.

‘Geen woorden maar daden’⁴⁸

the line of the famous hymn of the football club, Feyenoord, reflects the attitude of the Rotterdammer. Best conditions to start gardening on under used spaces in the city.

ENDNOTES

1 *noun* ‘the defining spirit or mood of a particular period of history as shown by the ideas and beliefs of the time’. *The Oxford Dictionary of English*

2 ‘the community of people living in a particular country or region and having shared customs, laws, and organizations’. *New Oxford American Dictionary*

3 ‘In Zeiten der Krise ist „Do it yourself“ der neue Luxus. Was zählt ist Individualität, nicht Massenware: (...) Selbermachen ist Trend. So mancher sieht darin sogar eine neue Wirtschaftsordnung.’ Margaier, A., 2009. Wir basteln uns eine Weltanschauung. *Frankfurter Allgemeine Sonntagszeitung*, 29. Apr.

4 ‘A term from cultural anthropology meaning customs that have become firmly established and transmitted throughout many generations and are characteristic of the society.’ *A Dictionary of Public Health*. Ed. John M. Last, Oxford University Press, 2007. Oxford Reference Online. Oxford University Press. Wageningen UR Library. 15 December 2009.

5 “Gerade jetzt in der großen Krise machen viele Leute die Erfahrung, dass ihnen alles entgleiten kann und sie vor einem schwarzen Loch stehen. Da sehnt man sich nach praktischen Dingen, nach etwas, das man anpacken und in den Griff bekommen kann.” (Margaier, A., 2009)

6 Viljoen, A., 2005, p.127.

7 Mukherjee, S. 2009. Trust frees land for allotments. *BBC news*, 19 February.

8 ‘Der Bundesverband Deutscher Gartenfreunde meldet, “die Generation Golf entdeckt den Garten neu”. Der Altersdurchschnitt in den 15.200 deutschen Kleingartenvereinen ist in kurzer Zeit um zehn Jahre gesunken, fast die Hälfte der seit 2000 neu verpachteten Parzellen wird von Familien mit Kleinkindern beackert.’ Rühle, A., 2008. Kleingarten-Boom in Deutschland: Laube, Liebe, Hoffnung: Warum die Schrebergärten zur Zeit einen zweiten Frühling erleben. *Süddeutsche Zeitung*, 17 May.

9 “We moeten met elkaar tuinieren als een belangrijke activiteit gaan zien.” Bader, N. en de Klein, M., 2009. De volkstuin is hip. *Leven*, zomer 2009, p.12-14.

10 ‘De vraag is nu hoeveel aspirant-tuinders de komende jaren klaar staan om de lege plaatsen op nieuwe en bestaande complexen op te vullen. Daarbij dient onderscheid gemaakt te worden tussen sier- of verblijfstuinen enerzijds en nuts- of moestuinen anderzijds. **De behoefte aan nuts- of moestuinen wordt groter: vooral 'Allochtonen willen graag een tuintje om er groenten te verbouwen en deze nu al grote bevolkingscategorie zal nog verder groeien.** De behoefte aan sier- en verblijfstuinen zal naar verwachting enigszins afnemen. **Nutstuinen moeten op loop- of fietsafstand van de woningen liggen;** voor de sier- en verblijfstuinen, waar men in de regel langer verblijft, is dit minder belangrijk.’ *Ruimtelijk Plan Rotterdam 2010*, p.24.

11 ‘Tegenwoordig melden allochtonen zich aan voor een tuin. In negen van de tien gevallen leggen de allochtonen een grote moestuin aan, waarmee zij terugkeren naar de oorsprong van de volkstuin, die als moestuin begon. (...) Een andere allochtone tuinder vertelde dat er in zijn flatgebouw geen enkele Nederlander woont. Die ontmoet hij wel in de volkstuin. Met de burens van de tuin is het makkelijk contact maken. Men wisselt informatie uit over groenten en plantjes, men ruilt stekken of gaat bij elkaar op de koffie.’ Van Eeuwen, M., 2009. *Allochtonen in de rij voor volkstuin*, NRC Carriere.

12 Crouch, D. and Ward, C., 1988. *The Allotment: its landscape and culture*. London: faber and faber.

13 Steenhuis, M., 2007. *Urban landscape design in the Interbellum: P. Verhagen (1882-1950) - the forgotten modernity of a design approach*. PhD.

14 Loidl-Reich, C. in conversation 15.02.2010, Berlin

15 Koolhaas, R. and Mau, B., 1995. Small, medium, large, extra-large : Office for Metropolitan Architecture. Rotterdam: 010 Publishers. p.403.

16 Provinciaal Historisch Centrum, Geschiedenis van Rotterdam. Available at: <http://www.geschiedenisvanzuidholland.nl/verhalen/geografischelocatie/65/Geschiedenis-van-Rotterdam> (accessed 16 December 2009).

17 Koolhaas, R. and Mau, B., 1995. Small, medium, large, extra-large : Office for Metropolitan Architecture. Rotterdam: 010 Publishers. p.403.

18 Goossens, T., 2002. *Wegen, afWegen: kwantitatieve berekening van het openbare ruimtegebruik in Rotterdam*. Wageningen:Wageningen Universiteit and Research.

19 Brinkman, E., ed., 2002. *De openbare stadstuin: de omsluiting en ontsluiting van de openbare stadstuin*. Rotterdam: NAI Uitgevers.

‘Op het Kralingse Bos, het Park aan de Maas en het Zuiderpark na, is het overgrote deel van de groene ruimte in Rotterdam te kwalificeren als een uniforme groene ruimte waaraan de stad te weinig expressiviteit, woon- en verblijfskwaliteit kan ontlelen. Kortom, de kwaliteit, toegankelijkheid, aantrekkelijkheid en herkenbaarheid van het stedelijk groen kunnen beter en gedifferentieerder.’ (Brinkman, E., ed., 2002.p.9, translated by Sitsen, E.)

20 ‘De gemeente Rotterdam is op papier de groenste gemeente van Nederland. Rotterdammers ervaren het alleen niet zo. Wethouder Lucas Bolsius (Buitenruimte) wil dit beeld veranderen en het groen in de gemeente meer zichtbaar en bereikbaar maken en beter verspreiden.’ (Gemeente.nu, Veel extra groen in gemeente Rotterdam, 2008., translated by Sitsen, E.)

21 ‘wat resteert is een grote hoeveelheid groen zonder identiteit en met beperkte gebruikswaarde voor de bewoners.’ (Goossens, T. p.36, translated by Sitsen, E.)

22 ‘Er (is) nogal wat spanning tussen de intensiteit van het gebruik, de ecologische potenties, de inrichting, het beheer en het onderhoud. Een kwantitatief tekort is er wel in de oude wijken. Die hebben te weinig groene buitenruimte - zowel per blok, per buurt als per wijk.’ (ds+V, 1999. *Ruimtelijk Plan Rotterdam 2010*. p.23, translated by Sitsen, E.)

23 *Groenonderzoek Rotterdam 2008*: samenvatting. ds+V, 2009.

24 ‘Rotterdam moet haast maken met de stedelijke vernieuwing. Die oproep deed een Canadese planoloog. Hij pleit voor veel meer groen in de versteende binnenstad.’ (Hoogstad, M., 2009, translated by Sitsen, E.)

25 Palmboom, F., 1987. *Rotterdam, verstedelijkt landschap*. Rotterdam: Uitgeverij 010.

26 **focal point**: the center of interest or activity (New Oxford American Dictionary)

27 Von Hassel, M., 2002. *The struggle for Eden: community gardens in New York City*. New York: Bergin & Garvey.

28 Groening, G. 1995. *School garden and Kleingaarten: for education and enhancing life quality*. Acta Hort. (ISHS) 391:53-64 Available at: http://www.actahort.org/books/391/391_4.htm

29 see for example Migge, L., 1913. *Die Gartenkultur des 20. Jahrhunderts*. Jena: Diedrichs.

30 ‘Eine wesentliche Voraussetzung für den Aufenthalt und die Tätigkeit im Kleingarten war die Laube. Sie war als Unterstellmöglichkeit für die benötigten Gartengeräte und für die die Kleingärtner bei Regen aus einem Schuppen im Garten entstanden. In Berlin war sie oftmals Wohnungsausgleich oder Wohnungersatz.’ (translated by Sitsen, E.)

31 www.jrank.org/gardening/pages/1180/Netherlands.html, accessed April 2010.

32 Patrick Taylor “allotment” The Oxford Companion to Garden. Ed. Patrick Taylor. Oxford University Press 2006. Oxford Reference Online. Oxford University Press. Wageningen UR Library. 8 June 2009. <http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t215.e0031>

33 ‘A Schrebergarten is an enclosed mini-garden (similar to an allotment) in a large common garden, usually just outside an urban area. As most German city-dwellers live in blocks of flats, many rent a Schrebergarten to provide them with a place where they can grow fruit and flowers and go to relax.’ *The Concise Oxford German Dictionary*. Ed. Michael Clark and Olaf Thyen. Oxford University Press, 2004. *Oxford Reference Online*. Oxford University Press. Wageningen UR Library. 17 December 2009. Available at: <<http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t65a.e44497>>

34 *The Concise Oxford German Dictionary*. Ed. Michael Clark and Olaf Thyen. Oxford University Press, 2004. *Oxford Reference Online*. Oxford University Press. Wageningen UR Library. 17 December 2009. Available at: <<http://www.oxfordreference.com/views/ENTRY.html?subview=Main&entry=t65a.e44497>>

35 ‘Dès 1920, le jardin ouvrier devient un modèle national. L'une de ses figures emblématiques en est l'Abbé Lemire, député-Maire d'Hazebrouck et fondateur en 1896 de la « ligue du coin de terre et du foyer ». Il trouve auprès de l'association son plus grand promoteur pour la cause du jardinage en milieu populaire pour lequel il milite.’ *Association des jardiniers de France*.

36 een klein lapje grond, buiten of aan de rand van de stad, waarop door stadsbewoners voedings- en siergewassen worden geteeld’ *Van Dale*. (translated by Sitsen, E.)

- 37 „stukje land aan stadsmensen verhuurd, voor het verbouwen van aardappelen, groenten enz.“. *Kramer's woordenboek*. Amsterdam: Elsevier. translated by Sitsen, E.
- 38 'De volkstuin is hip' (Bader, N. en de Klein, M., 2009)
- 39 'Especially Rotterdam – whose centre was completely destroyed in the war and where hard, low-paid work was performed in the harbour – is famous for its labour ethics. This attitude is perfectly reflected in the most famous line of the hymn of the Feyenoord soccer club, which is based in Rotterdam: 'Geen woorden maar daden' (roughly: 'Not words, but deeds').' (Jacobs, M., 2006, p.83)
- 40 Reynolds, R., 2008. *On Guerrilla Gardening: A handbook for gardening without boundaries*. London: Bloomsbury Publishing PLC. p.6.
- 41 Haydn, F. and Temel, R. (ed), 2006. *Temporäre Räume: Konzepte zur Stadtnutzung*. Basel: Birkhäuser. p.259.
- 42 Netherlands, the - Climate, Flora, A brief history of gardening, Allotments or people's gardens, Cemeteries, Public gardens
- 43 'In Rotterdam werd het eerste complex van 154 volkstuintjes in 1911 in Kralingen geopend door de Maatschappij tot Nut van 't Algemeen. In 1914 volgde er een complex met 132 tuintjes in de Spangense Polder. (www.bds.rotterdam.nl)
- 44 'De RBvV heeft als doelstelling de bevordering van het tuinieren in het algemeen, het stimuleren van het natuurlijk tuinieren en het behartigen van de belangen van haar leden en van de bij de RBvV aangesloten verenigingen in de regio Rotterdam.' (www.rbvv.nl)
- 45 'De op de ladder wat lager gelegen volkstuin speelt misschien wel de belangrijkste rol in de democratisering van onze tuincultuur.'
- 46 Vries, de, S., Schöne, M.B., 2004. *Volkstuinparken in Amsterdam: De sociaal-culturele dimensie*. Alterra, Research Instituut voor de Groene Ruimte, Wageningen.
- 47 Waldherr, G., 2009. Die Bauern von New York. *Brand Eins*, 11 (5), p.48-55.
- 48 famous line of the hymn of the Feyenoord soccer club.

LIST OF LITERATURE

books

Brinkman, E., ed., 2002. *De openbare stadstuin: de omsluiting en ontsluiting van de openbare stadstuin*. Rotterdam: NAI Uitgevers.

Bruinwold Riedel, J., 1905. *Arbeiderstuinen: in buiten en binnenland*. Utrecht: Boekhoven.

Conan, M., 1999. *From vernacular gardens to a social anthropology of gardening*. In Conan, M., ed. Perspectives on Garden Histories. Washington: Dumbarton Oaks, 1999. p.181-204.

Crouch, D. and Ward, C., 1988. *The Allotment: its landscape and culture*. London: faber and faber.

De Josselin de Jong, F., Hoekstra, M.J., Meyer, H., 2006. *Het ontwerp van de openbare ruimte*. Amsterdam: SUN.

Geissler, C.A. and Vaughan, J.G., 2009. *The new Oxford book of food plants*. 2nd ed. New York: Oxford University Press Inc.

Haydn, F. and Temel, R. (ed), 2006. *Temporäre Räume: Konzepte zur Stadtnutzung*. Basel: Birkhäuser.

Jacobs, M., 2006. *The production of mindscapes: A comprehensive theory of landscape experience*. Ph. D. Wageningen University.

Palmboom, F., 1987. *Rotterdam, verstedelijkt landschap*. Rotterdam: Uitgeverij 010.

Seymour, J., 2003. *The complete book of self-sufficiency: the classic guide for realists and dreamers*. 3rd ed. London: Dorling Kindersley Limited.

Van Rooijen, M., 1990. *De wortels van het stedelijk groen: een studie naar ontstaan en voortbestaan van de Nederlandse groene stad*. Breda: Erasmus universiteits drukkerij.

Verhagen, P, 2004. *Het geluk van de tuin: een aansporing tot het zinvol tuinieren*. Amsterdam: Gianotten.

Viljoen, A. (ed). 2005. *Continuous productive urban landscapes: designing urban*

agriculture for sustainable cities. Oxford: Architectural Press.

Von Hassell, M., 2002. *The struggle for Eden: community gardens in New York City*. New York: Bergin&Garvey.

Vries, de, S., Schöne, M.B., 2004. *Volkstuinparken in Amsterdam: de sociaal-culturele dimensie*. Alterra, Research Instituut voor de Groene Ruimte, Wageningen.

Vroom, M.J., 2005. *Lexicon van de tuin- en landschapsarchitectuur*. Wageningen:Uitgeverij Blauwdruk.

Weeber, C. ; Stiphout, W. van ; Heer, J. de. *Het wilde wonen*. Rotterdam : 010 Publishers.

Zeevat, C., 2001. *Tot nut & genoeg: volkstuincultuur in Nederland*. Rotterdam: 010 Publishers.

articles from magazines

Bader, N. and de Klein, M., 2009. De volkstuin is hip. *Leven*, zomer 2009, p.12-14.

Braun, C. and Pfeil, M., 2008. Die Wachstumsbranche. *Brand Eins* 12, p.110-119.

Buckingham, S., 2005. Women (re)construct the plot: the regen(d)eration of urban food growing. *Area*, 37(2). p.171-179.

Howe, J. and Wheeler, P., 1999. Urban food growing: the experience of two UK cities. *Sustainable Development*, 7(1), p.13-24.

Kleis, R., 2009. Boeren in de stad. *Resource*, 27 August.

Waldherr, G., 2009. Die Bauern von New York. *Brand Eins*, 11 (5), p.48-55.

newspaper articles

Den Dekker, M., 2008. Volkstuin populair, maar onderschat. *Nieuw Amsterdams Peil*. 3 Oct.

Haschnik, G. 2007. Daheim bei den Laubenpiepern: für die einen sie sind sie der Inbegriff des Spießbürgertums, für die anderen wahre Naturfreunde: Kleingärtner finden immer mehr Anhänger. *Süddeutsche Zeitung*, 29 June.

Hoogstad, M. 2009. Een shocktherapie voor Rotterdam: Stedelijke vernieuwing Canadese planoloog stelt voor havenstad op de schop nemen. *NRC Handelsblad*, 6 October.

Marguier, A., 2009. Wir basteln uns eine Weltanschauung. *Frankfurter Allgemeine Sonntagszeitung*, 29. April.

Mukherjee, S. 2009. Trust frees land for allotments. *BBC news*, 19 February.

Rühle, A., 2008. Kleingarten-Boom in Deutschland: Laube, Liebe, Hoffnung: Warum die Schrebergärten zur Zeit einen zweiten Frühling erleben. *Süddeutsche Zeitung*, 17 May.

Van Eeuwen, M., 2009. Allochtonen in de rij voor volkstuin. *NRC Carriere*.

Van Lieshout, M., 2009. Iedereen naar de volkstuin: weg met de hekken. *De Volkskrant*, 15 April p.12-13.

Weidner, I., 2009. Kräuter gegen die Krise: schön und zugleich praktisch: Gärtnern ist zu einem der beliebtesten Hobbys avanciert. *Süddeutsche Zeitung*, 18 May.

Wiborg, S., 2009. Grüner wird's nicht: warum zieht es in diesem Jahr alle Welt in den Garten, sogar Michelle Obama und die Queen, Filmstars und Schriftsteller? Unsere Autorin gräbt nach einer Antwort – im eigenen Beet. *Die Zeit*. 13 August.

websites

VROM, dossier Volkstuinen, available at <http://www.vrom.nl/pagina.html?id=34213> (accessed 04.06.2009)

www.rbvv.nl, Rotterdamse Bond van Volkstuinders

research work

Deutsches Kleingärtnermuseum, Leipzig: diverse publications

Groenonderzoek Rotterdam 2008: samenvatting. ds+V, 2009.

Goossens, T., 2002. *Wegen, afWegen: kwantitatieve berekening van het openbare ruimtegebruik in Rotterdam*. Wageningen:Wageningen Universiteit and Research.

Mulder, M. and Oude Aarninkhof, C., 2008. *Productive urban landscapes: urban agriculture in post-industrial cities*. Master thesis of Wageningen University, supervisor: Dr.Ir. Duchhart, I.

Onderzoek Leipzig: Kleingartenkonzeption Leipzig 2002, überarbeitete Fassung 2003.

Pleijster, E.J., van der Veen, C. and Veenstra, P., 2007. *De toekomst van het volkstuinieren in Charlois*. Rotterdam: Deelgemeente Charlois and Lola landscapearchitects.

Timmermans, W.; Hiddes, E.; Visschedijk, P.A.M.; Gerritsen, E.; Woestenburg, M., 2006. *Groen in en om de stad : onderzoek GIOS 2006*. Wageningen : Alterra.

Rekenkamer Rotterdam, 2006. *Volkstuinenbeleid in Rotterdam: Vergeet-mij-nietjes aan de Maas*. 's Gravenzande: Sonneveld.

1

phenomenon
allotment garden

+

2

problem
a lot poorly maintained, anonymous
public space in Rotterdam

=

new possibilities for a contemporary form
of allotment gardens in Rotterdam

the volkstuin+

HYPOTHESIS

General

1 Allotment gardens can be a tool to give form to and to make better use of surplus of anonymous, not attractive, lifeless public space and to allow the inhabitants to make this space their own.

2 Rotterdam has a lot, but little attractive public space. Allotting open spaces to citizens would be a possibility to enhance the quality of public spaces, to use them in a productive way and to lend identity to those spaces. Creating and organising allotment- and community gardens here could give the urban space (in Rotterdam) a new purpose and destiny, meaning and significance and life.

3 Concerning the successful history of allotment gardens on the one hand and the surplus of public space on the other hand, these two aspects are suitable to bring them together and develop out of them a new garden-concept for the city (of Rotterdam), where citizens actively contribute to the quality of the urban space. That way, the extensive anonymity and lifelessness could change into personal, individual, productive and lively spaces.

Rotterdam

4 The inhabitants of Rotterdam can take part in giving form to their city (long-term view) by the implication of allotment gardens on (surplus/rest) public spaces in the city.

5 Given that allotment gardens have a great tradition in Rotterdam they might offer chances for the future of qualities of living in the city. With the side-effect of releasing the municipality partly from maintenance.

Position of the designer

6 How can a designer let people make their own spaces but still play an essential role? one can compare it with the role of an architect. he designs and organises a building but when it is built, people make their personal spaces (adopt and embrace the space) and live in it. Like in a building, people have to live (in) their city and feel well.

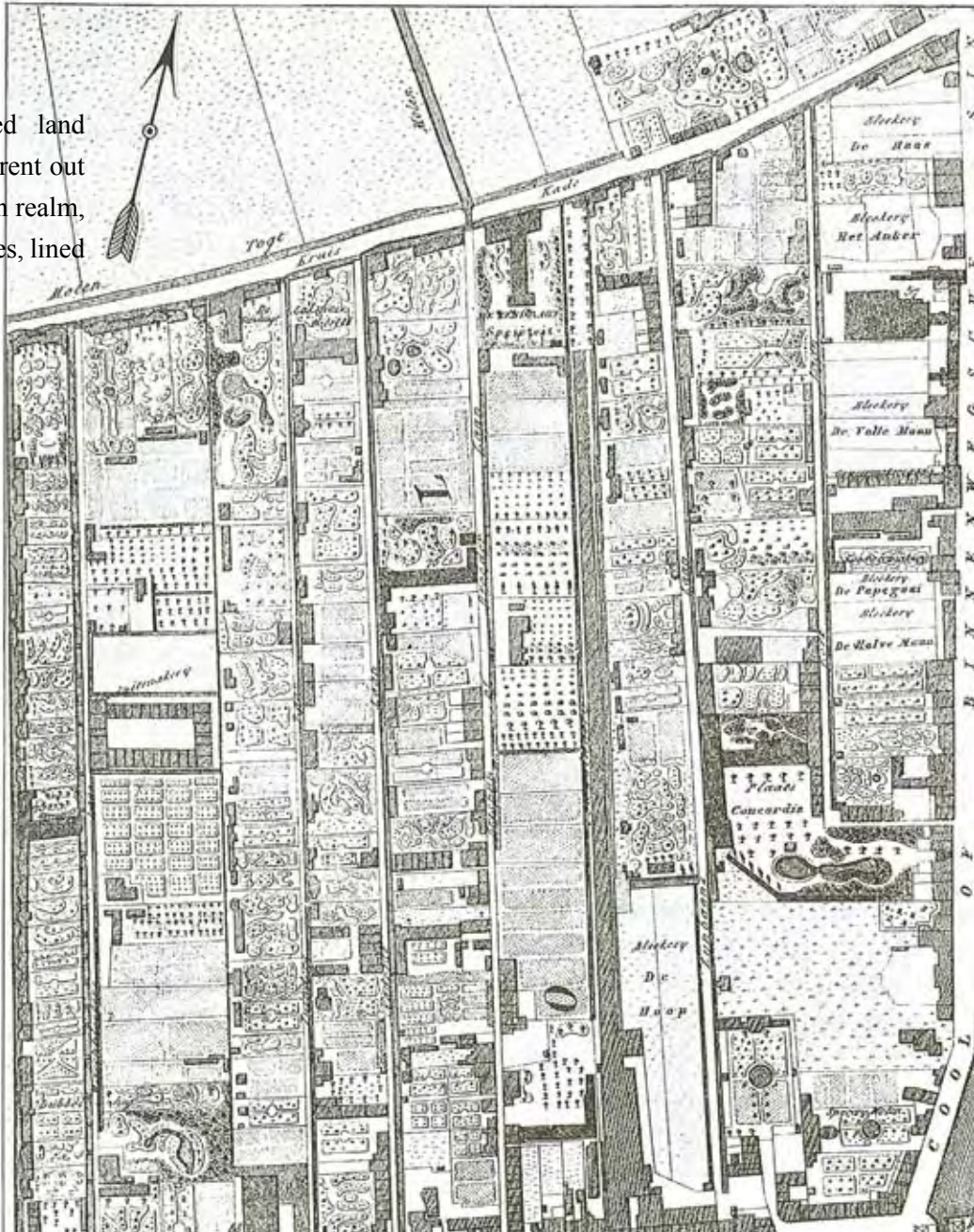
7 It is a different challenge for a designer to leave space for peoples own ideas and contribution than designing places completely.

LOCATION OF GARDENS IN ROTTERDAM THROUGH TIME

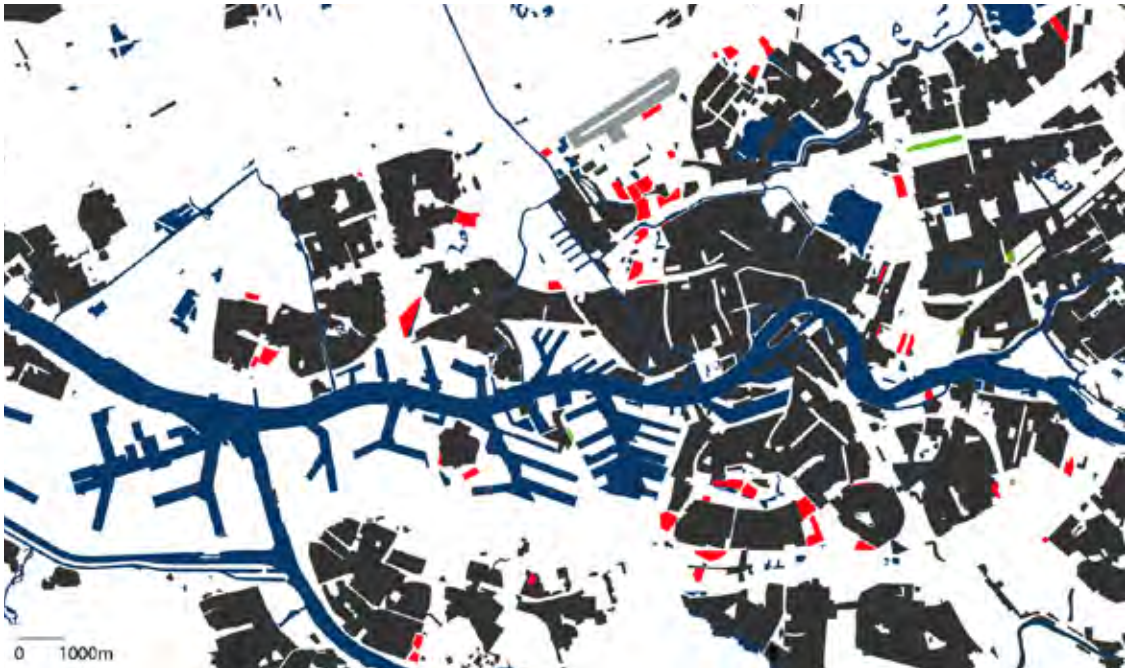


situation of gardens about 1800, a big variety of gardens outside the city walls

Laanorganisaties (avenue organizations), acquired land along the avenues leading from the city in order to rent out plots to individuals. It must have been a great garden realm, where one could walk through the straight, small lanes, lined by hedges that enclosed the gardens. Vegetable gardens of the normal man mixed with summer cottages of the richer people.



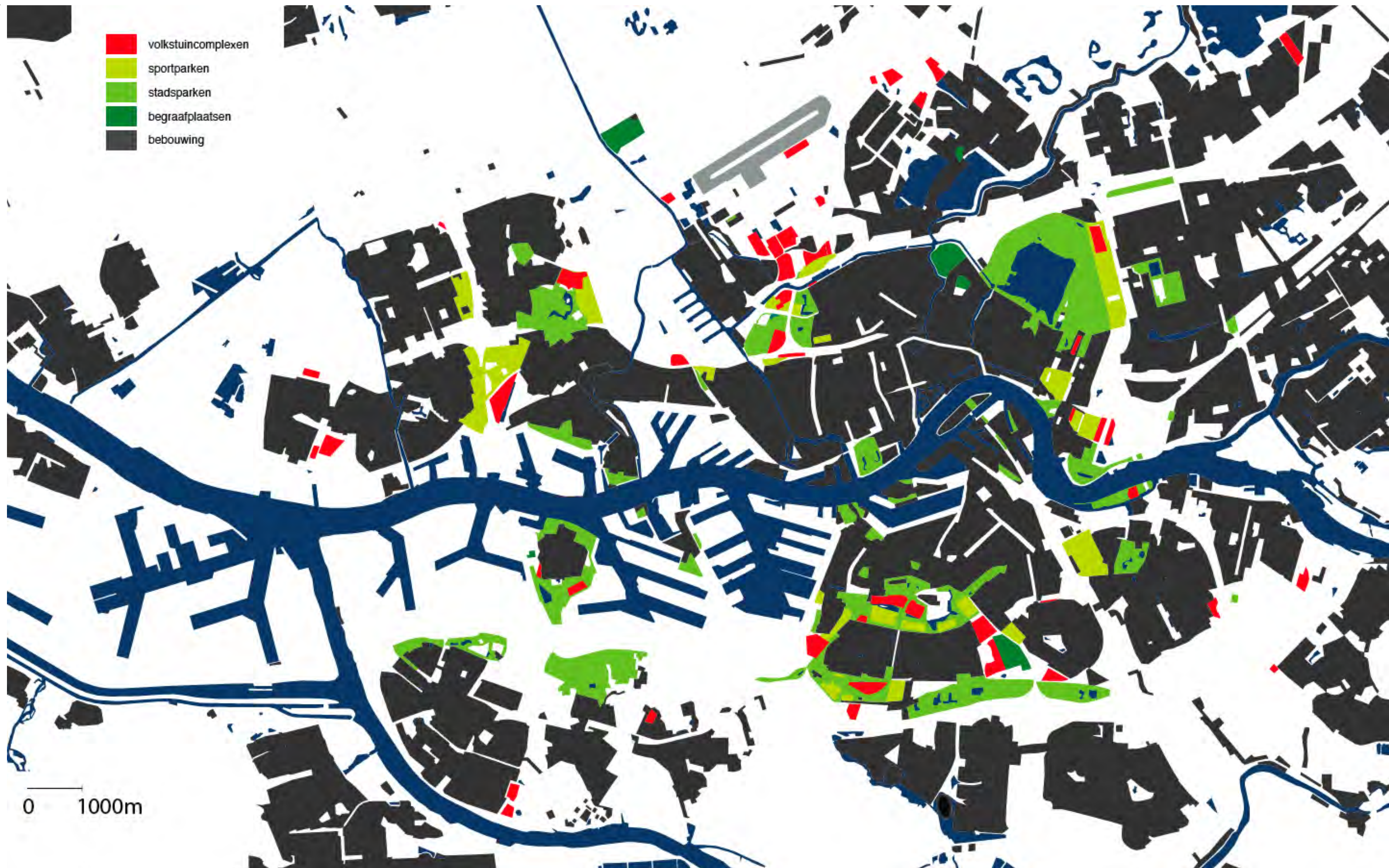
Lanengebied inbetween Kruiskade, Coolsingel en Binnenweg, about 1839



situation of allotment gardens 2010, most of them at the borders of the city, as autonomous entities



allotment gardens are often bundled along heavy infrastructure, on places that are not usefull for more profit-oriented fill-in.



allotment gardens as part of the city's bigger green structure, in the shell of bigger city parks, sport terrains and cemeteries.

shift in general

type	functional	→	ornamental
purpose	surviving	→	leisure
image	vegetables	→	lawn, garden house, swimmingpool
gardeners	poor industrial workers	→ bourgeois fifty years old+	a cross section through society, all kind of nationalities, classes, ages
location	city borders	→	more and more out of the city core synchronised to city extensions allotments were moving increasingly far away from the city center



from utility to leisure.

demand for new gardens anno 2010

<i>type</i>	→	mixed
<i>purpose</i>	→	personal expression, social connection, pleasure of gardening
<i>image</i>	→	clourful, inviting
<i>gardeners</i>	→	all citizen
<i>location</i>	→	the middle of the city

=
the *volkstuin+*

‘De behoefte aan nuts- of moestuinen wordt groter: vooral allochtonen willen graag een tuintje om er groenten te verbouwen en deze nu al grote bevolkingscategorie zal nog verder groeien.

De behoefte aan sier- en verblijfstuinen zal naar verwachting enigszins afnemen.

Nutstuinen moeten op loop- of fietsafstand van de woningen liggen; voor de sier- en verblijfstuinen, waar men in de regel langer verblijft, is dit minder belangrijk.’

Ruimtelijk Plan Rotterdam 2010, ds+V, 1999, p.24



potential volkstuin+ 's in the inner city!

urban (outside NL)

- Paris, rue Rubens/rue du Banquier, community garden
- Paris, jardins aux habitants, Palais de Tokyo
- Paris, rue Charles Delescluze, community garden on building lot
- Kleingartenanlage Düsseldorf, Oberkassel
- Denemark, allotments Naerum
- New York, community gardens van Liz Christy in the seventies
- Hollywood, allotment gardens in the middle of villa gardens with swimming pool
- New York, South Bronx, ‘Garden of Happiness’

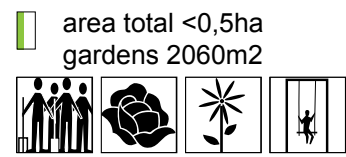
urban (NL)

- Rotterdam, Heijplaat allotment gardens (nutstuinen)
- Rotterdam Zuiderpark
- Hoek van Holland
- Amsterdam Frankendael
- Amsterdam GWL-terrain
- Amsterdam Westerpark

transition city_countryside

- Wageningen, on the Eng
- Renkum, neighbourhood gardens
- Duintuinen near Egmond aan zee, allotment gardens in the dunes
- garden Switzerland

Comparison of diverse (allotment) garden projects



100m



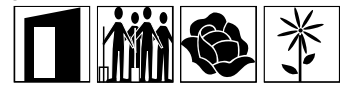
Paris, rue Rubens/rue du Banquier, community garden (F)

23 people of the neighbourhood garden here together! The gardens are a unique delight to their visitor, contrasting with their high dense urban environment. Supervision is guaranteed - the gardeners live around and can watch the gardens from their windows – which is important concerning the gardens protection and care. Not only the gardeners but also people that take a shortcut from one street to another can enjoy this oasis-like place in central Paris.

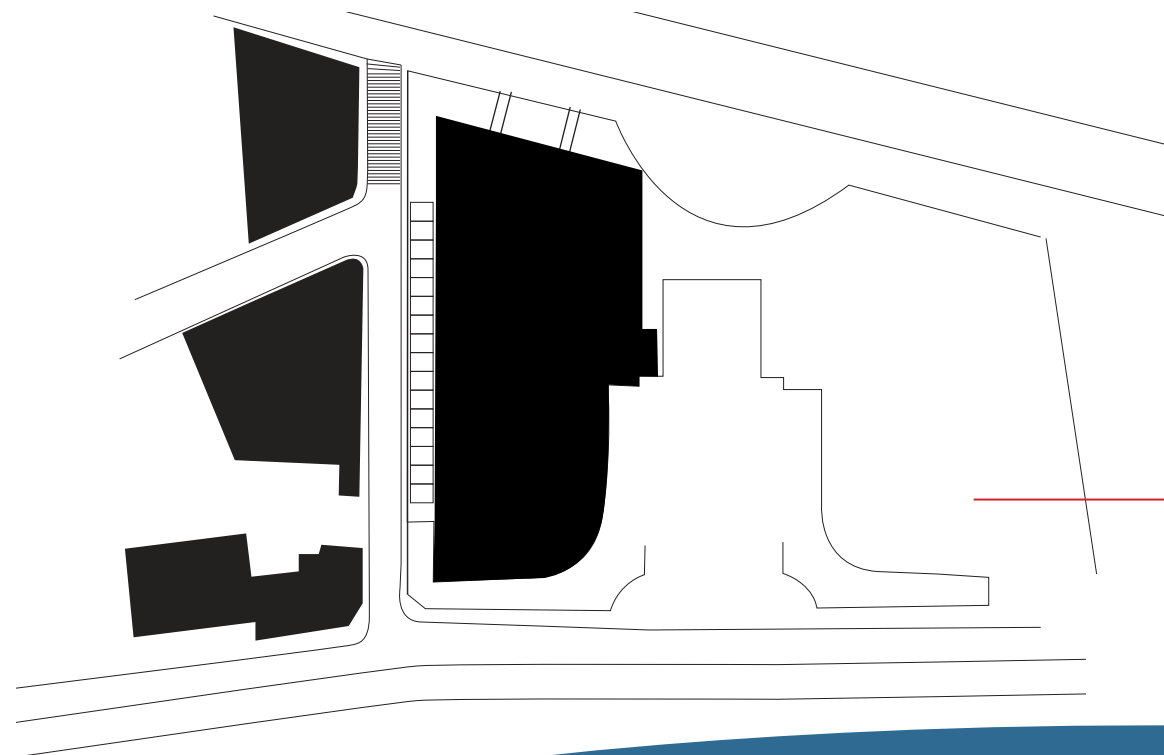


rue du Banquier, school, Avenue des Gobelins, butcher, bakery, supermarket, pharmacy, metro

gardens 510m²

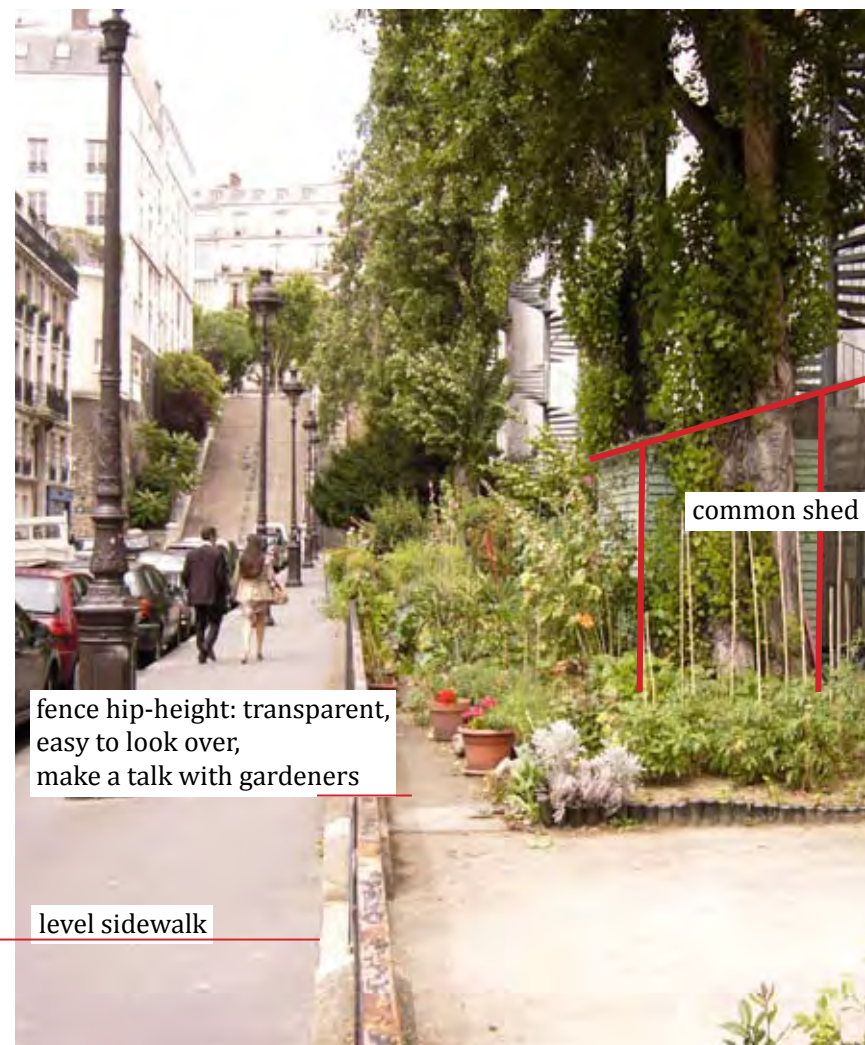


plot 30m²
17 gardens



Paris, jardins aux habitants, Palais de Tokyo

The gardens are situated directly next the public sidewalk, only an iron fence on hip height indicates the gardeners property. Such an experience of these colourful gardens, next to the modern museum in Paris, close to the Seine and the Tour Eiffel, enlivens central Paris and is a joy for the eye of everyone who passes by.



100m



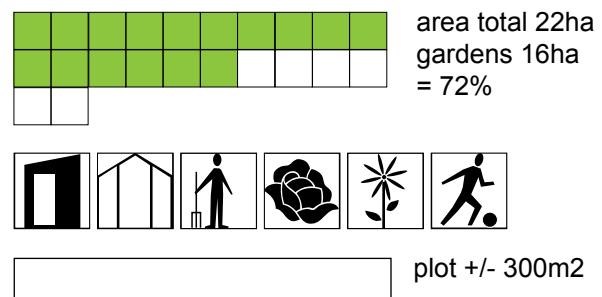
garden 270m2



A community garden on an empty building lot. The city permits the neighbours to keep a garden here, until the lot will be built. Seven gardeners share the space, in summer they organise dinners of fresh reaped vegetables. The garden is fenced all around, participating gardeners hold a key to enter.

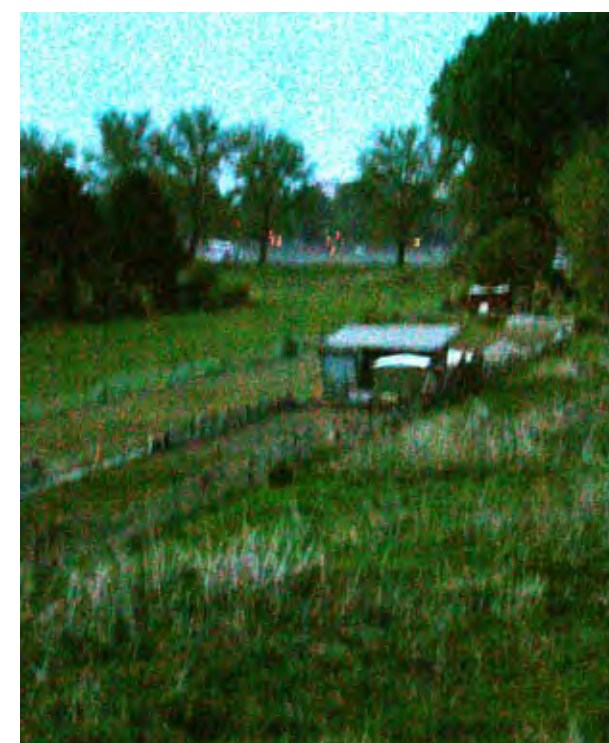


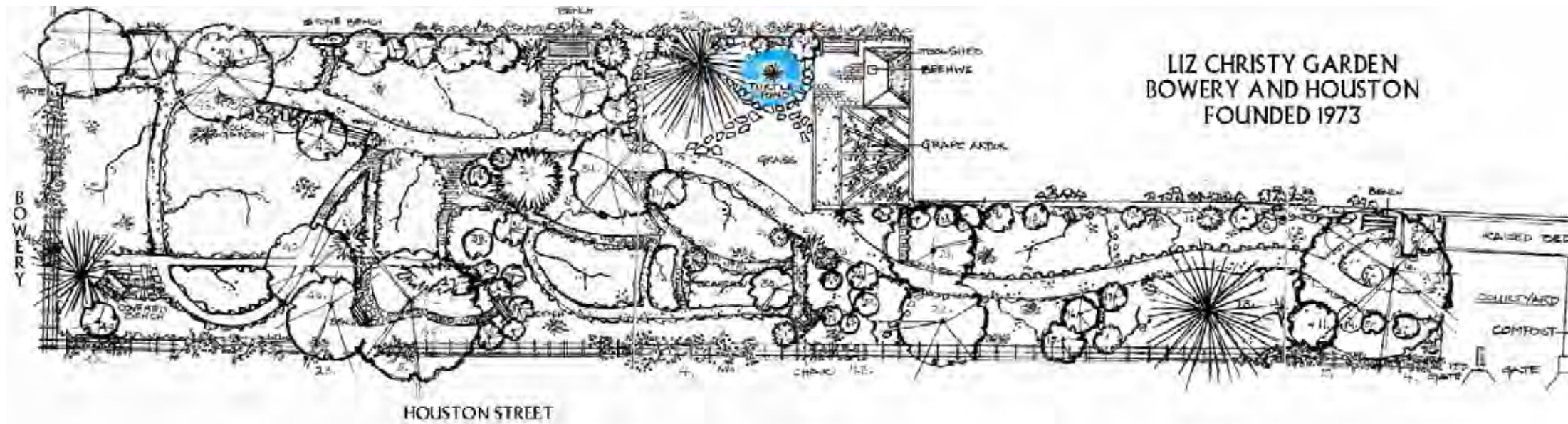
Paris, rue Charles Delescluze, community garden on building lot



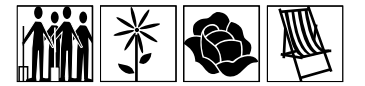
Those allotment gardens are located on the opposite riverside of the city Düsseldorf. On the flood plane in between river and dyke the allotments are subject to frequent flooding during the winter – which fertilizes the ground. The long parcels are nerved by walking paths and alternating with agricultural lands.

Kleingartenanlage Düsseldorf, Oberkassel (D)





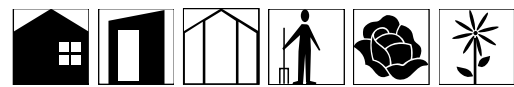
garden _ 700m2



During the tough times of the 70's, Liz Christy in New York is the mother of community gardening on waste lands. Self-initiative as an answer on failings in politics and economics.

New York, community gardens of Liz Christy in the '70s

area total _ 3ha
gardens _ 1.8ha = 60%



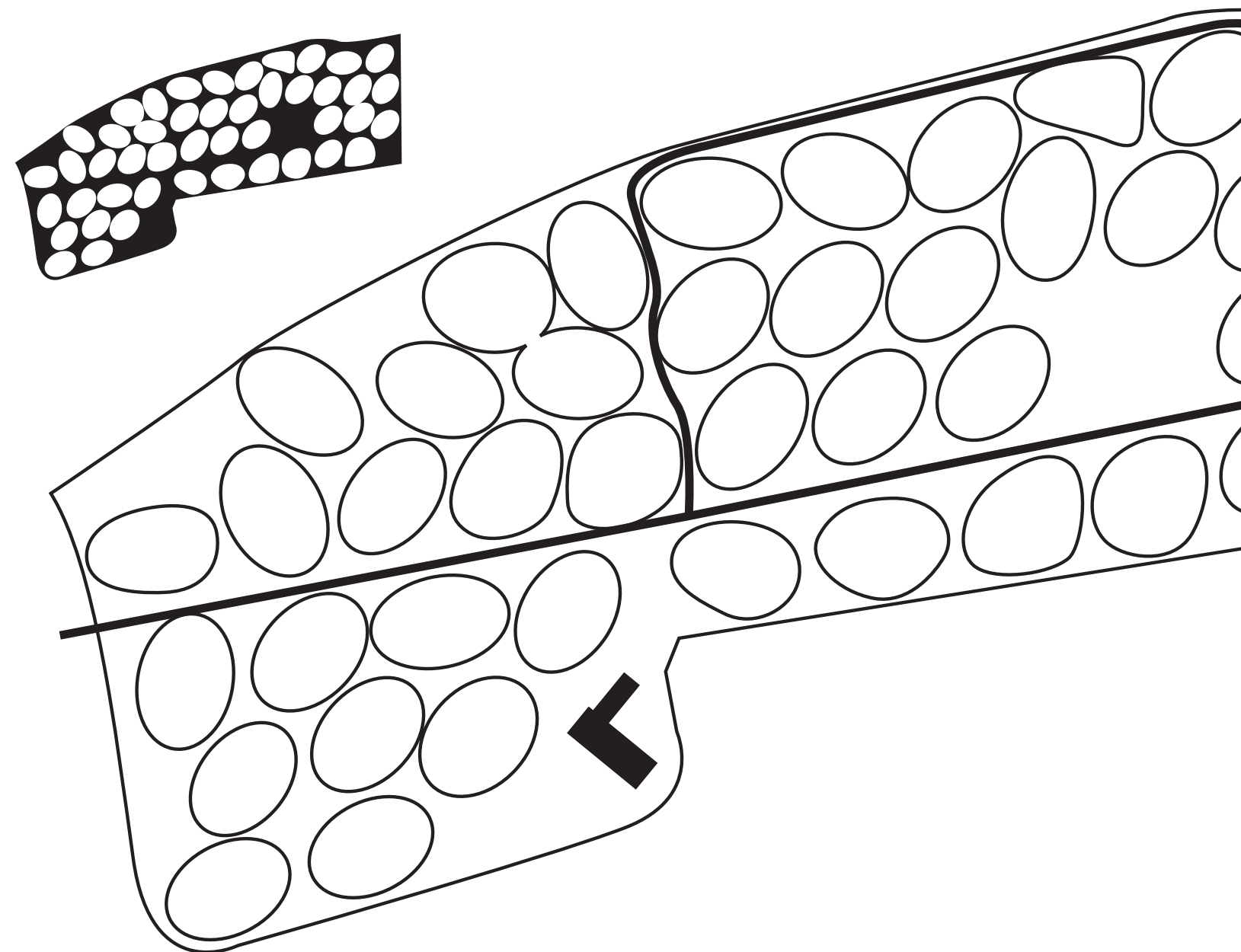
plot +/- 375m²
50 gardens



50m



Denmark, allotments Nærum

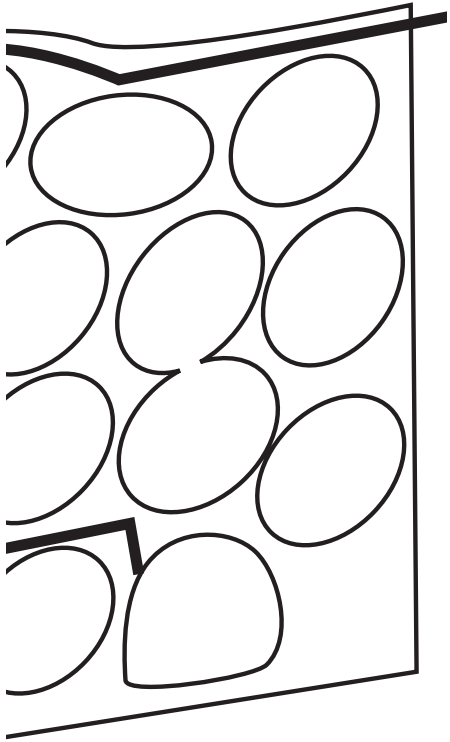


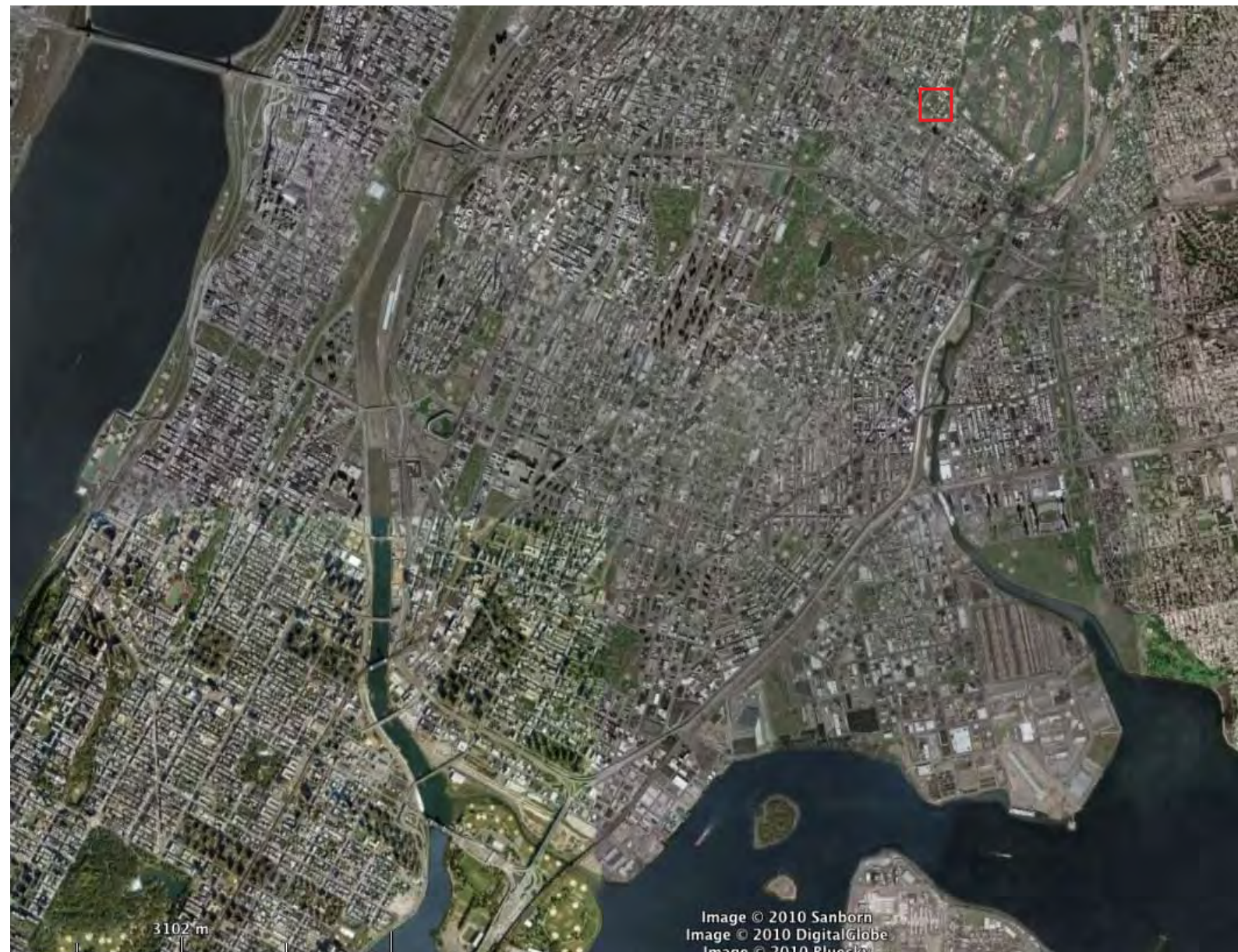
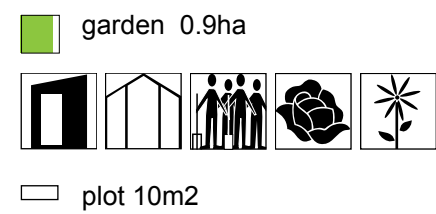
50m

Designed by the Danish landscape architect C.Th.Sørensen in 1948, these allotment gardens in Nærum, North of Copenhagen, differ from the common structure of the grid. The gardens are formed by oval hedges. Result is a positive/negative structure where people have their personal spaces within a general structure – with varying extends - that allows access as well as it creates meeting spaces on bigger in between spaces.



Hollywood, allotments in villa neighbourhood





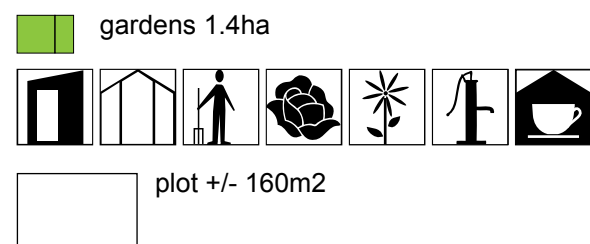
NY, South Bronx, Garden of Happiness, 877m2

The ‘Garden of Happiness’ is located in the South Bronx – a tough and poor area. Turned 1998 from waste land into a garden by initiative of citizens. People meet here and grow vegetables, herbs and berries and hold 15 laying hens. People pay 30 Dollars/year per bed. What exceeds personal requirements is sold on a small market. Karen Washington (see picture left), founder of the garden is a physical therapist. She states or in her job or in the garden she wants to recover functionality – of people and of spaces.

(source: Waldherr, G. Die Bauern von New York, *BrandEins*.)

40 m



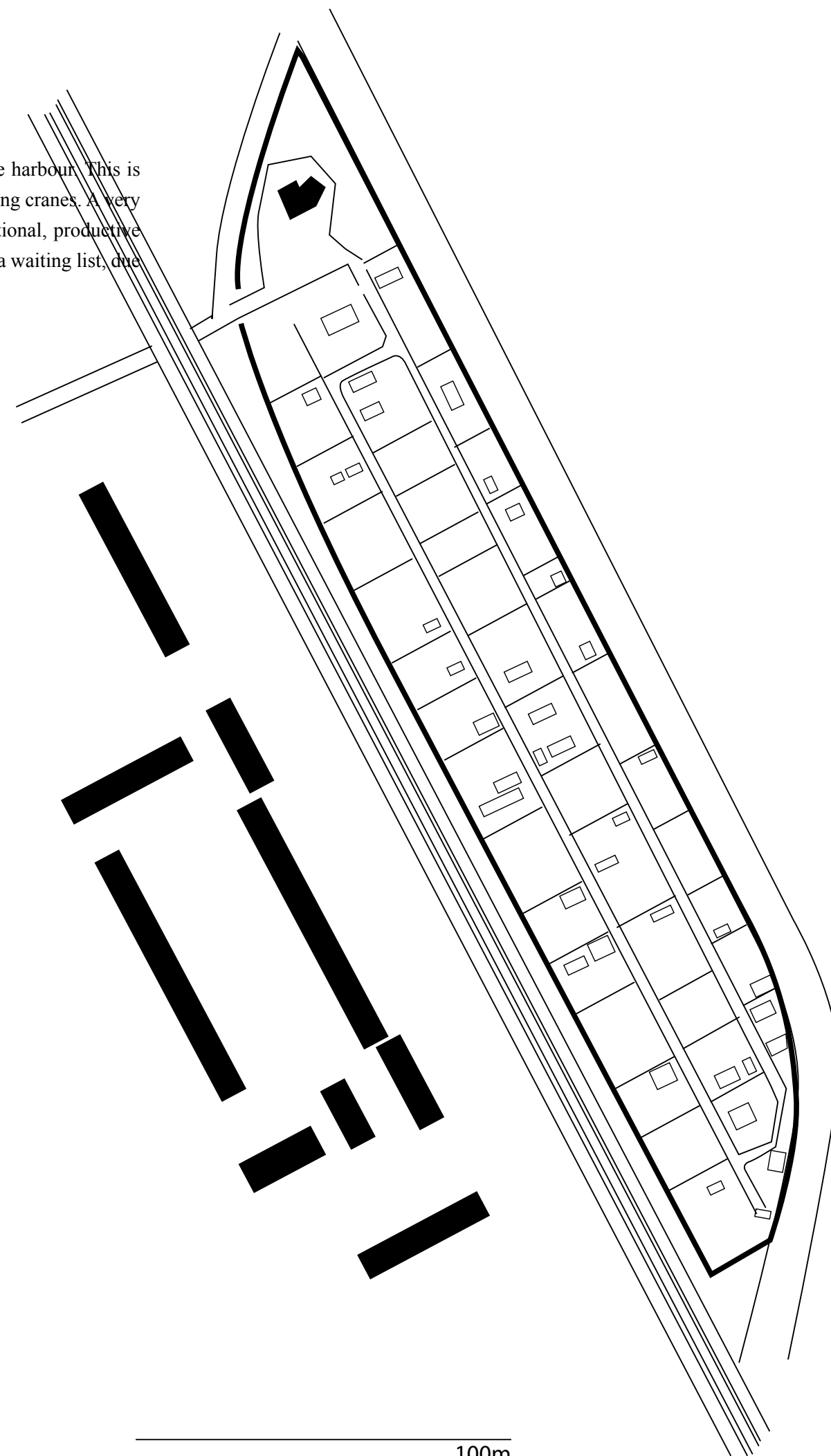


The allotment complex Heijplaat is located in the middle of the harbour. This is Rotterdam: the Maas, strong wind, containers, ships and the loding cranes. A very animated place, a come together of different cultures and traditional, productive kitchen gardening. The only garden complex in Rotterdam with a waiting list, due to low plot prices and more open rules.



50m

Rotterdam, Heijplaat allotments (vrije tuin)



100m





left page:

A man from Suriname and another from Cape Verde, proud to show their products:
typical vegetables from their home countries.

this page:

The 'commisaris', 65 years old: 'What should you do with all the time when you are retired? I am glad to have this garden here!'





total 225ha
4 allotment complexes



500m



Rotterdam Zuiderpark



De Zandweg

De Zuiderhof

Oldegaarde



ontwerp 1951, Hanekroot en Bijhouwer

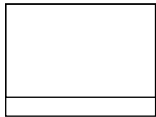


1 De Zandweg, De Zuiderhof

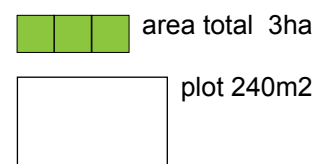
gardens 2,4 ha



plot 250-300m2
55 gardens



2 Oldegaarde



100m

In Hoek van Holland an allotment garden complex is located in the core of the urban conglomeration. It works as a city district – impressing with its clear structure. A green hart of Hoek van Holland.



150m

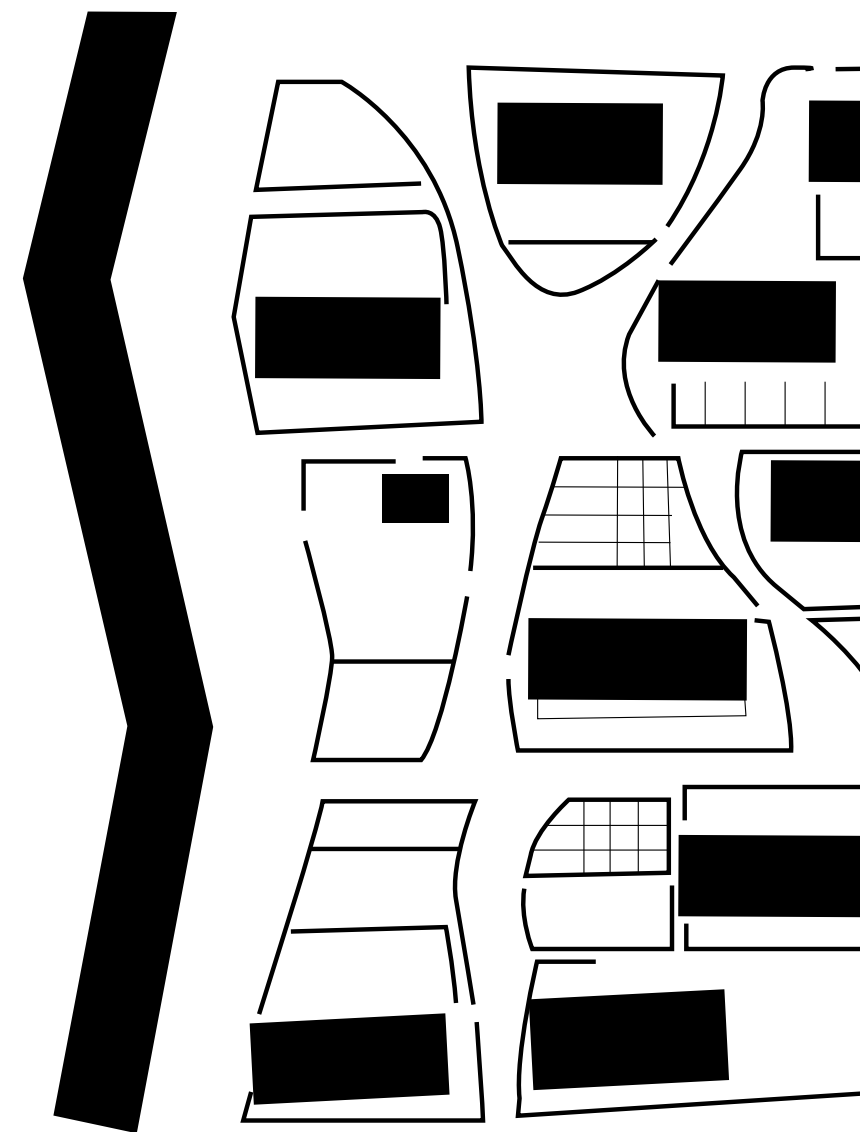
Hoek van Holland

area total 6ha
gardens 1.8ha = 30%



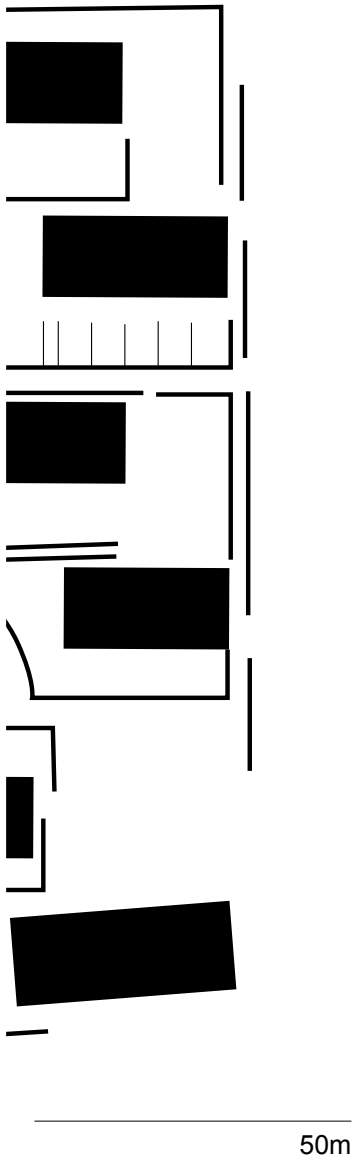
plot 12m2

In this plan, there are private and collective gardens attached at the housing block. A strong structure of hedges frames the gardens. A solid spatial concept for a transition from public (pathways/pavement) to semi-public (collective gardens, often via a door accessible) and private. Inhabitants pay only 30€ per year to hold a garden plot of 12m2.



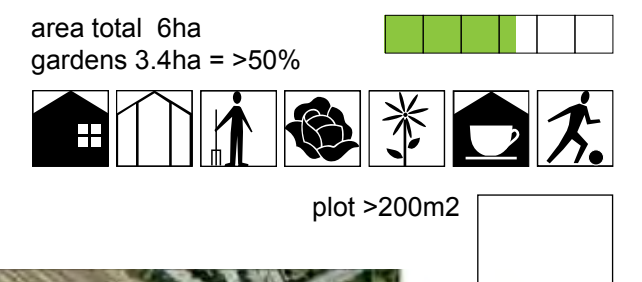
100m

Amsterdam, gardens of inhabitants GWL terrain

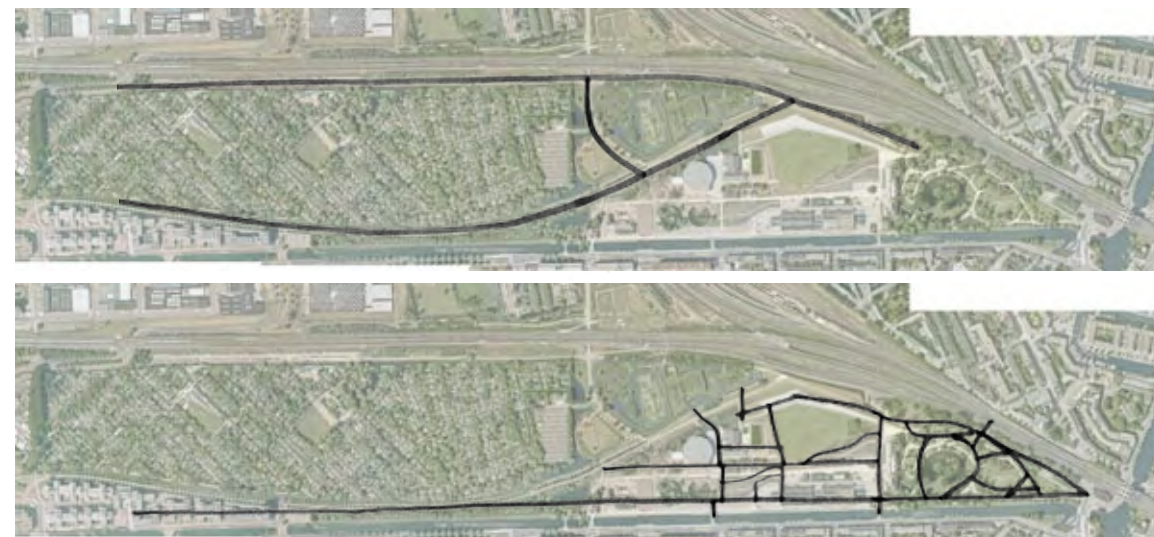




left and upper picture: lush hedges frame the gardens and create good green lining of the routes through the neighbourhood. bottom: used gardens attached to the apartment buildings. the individual garden plots are only separated by pathways of tiles.



100m



sketch top: the routing passes along the allotment complex, there is no direct entrance from the park!
bottom: park routing is not connected with the allotment access

Next to a big city park and a entertaining area of cafés, bars and ateliers for artist one finds stretched allotment complexes in the Westerpark in Amsterdam, located just North/West of the city centre. What directly strikes the visitor is that the official park routing bypasses the autonomous allotment complexes in East-West direction. One would rather wish for some fast North-South connections that integrates the richly overgrown allotments with the surrounding neighbourhoods.



optimal situation: pathways leading through allotment complex are connections of the neighbourhoods around it.

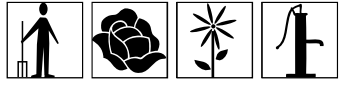
Amsterdam Westerpark



Pepole create their own paradises on the allotment. Work and care are visible.



top left: the general routing bypasses the allotment complex! no way to bridge the broad canals.
bottom left: a sign that represents the narrow rules that dominate most of the allotment complexes.



 plot 150m²



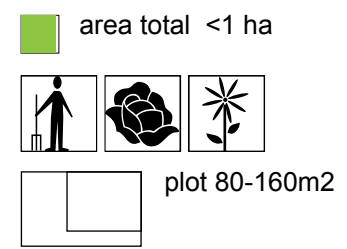
100m



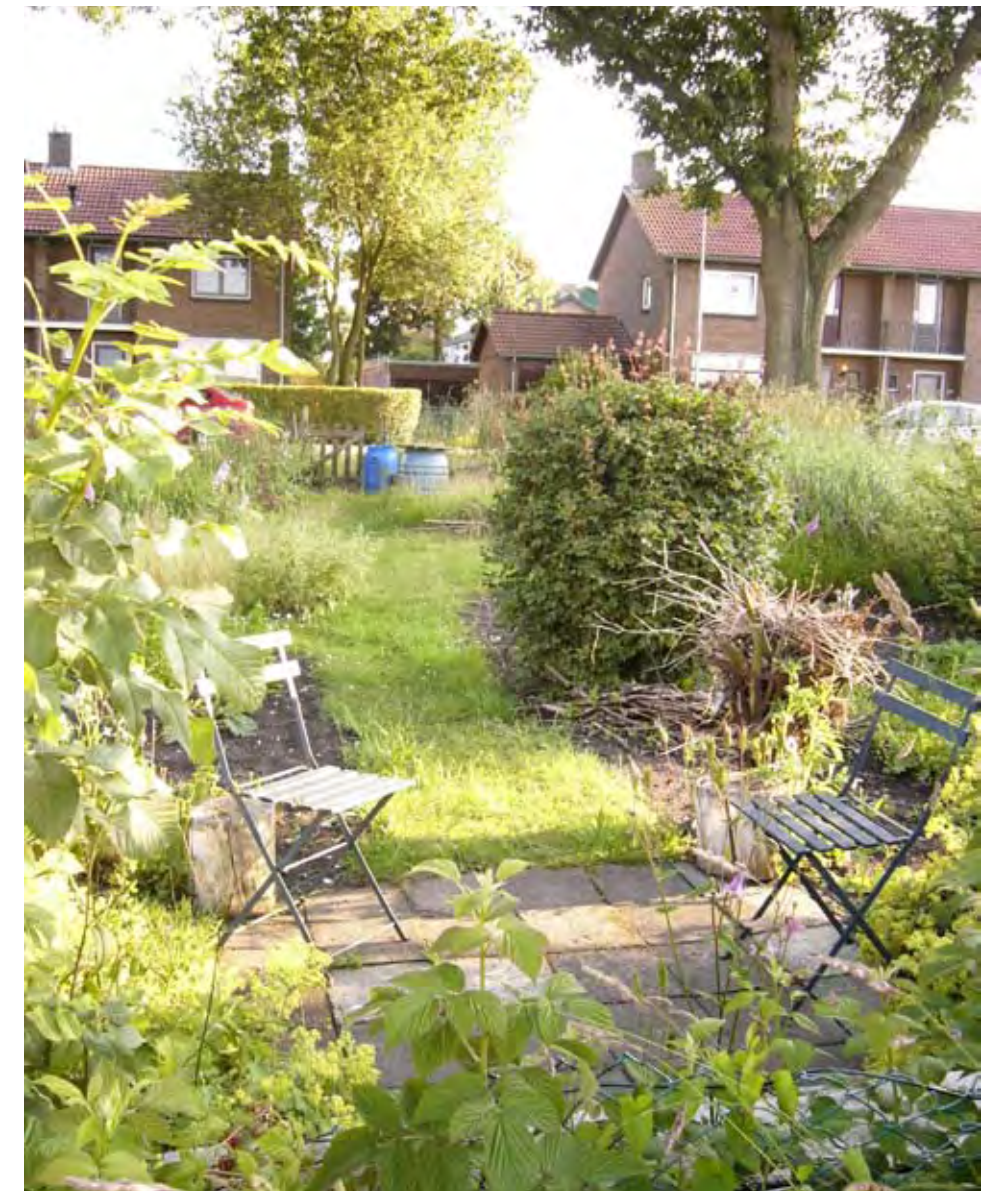
Wageningen, allotments on 'De Eng'

On this former agricultural area – de Eng – diverse Wageningen inhabitants still grow vegetables. Very charming image on the open field in between ridge and village. Many gardeners live in one of the flats nearby, that have no garden. In this way they have the allotment on walking distance and can even watch it from their balcony. Beautiful, pure gardens: greenhouses and sheds are not allowed. The plots are separated by grass paths and the gardens are bordered by informal wooden poles and mesh wire. Mainly vegetable gardens, sometimes mixed with flower gardens. Highlight is a flower picking garden, where one can cut oneself a baroque bouquet.





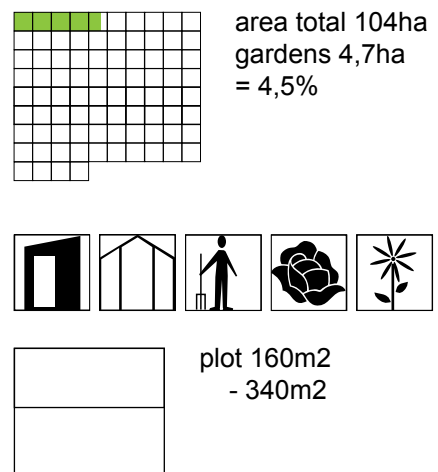
100m



Renkum, neighbourhood gardens







Egmond aan zee, dune gardens

200m





Unexpected phenomenon of vegetable gardens in the dunes in North-Holland. Necessary for the poor fisher folk of Egmond to grow potatoes for their existence. The gardens are irregularly spread through the dunes. Small, well maintained, cultivated plots contrast with the rough, parched dune landscape. From the small village Egmond aan zee leads a path through the garden area to the wide nature reserve that extends till the next seaside resort, Bergen.





A garden - spatially not direct related to the house - is located free on the pasture and lives up to its name: the garden as enclosed piece of land. Clear sign: the garden belongs to somebody.



garden Switzerland

LEGEND

- 

ha total area,
square = 1ha
- 

% percentage pure
garden area
- 

size of the idividual plot,
1:1000

- 

shed for tools only
- 

greenhouse
- 

shed for stay
- 

individual gardens
- 

collectivel garden
- 

vegetable garden
- 

ornamental garden
- 

leisure garden
- 

canteen
- 

sport facilities
- 

playground
- 

water connection
- 

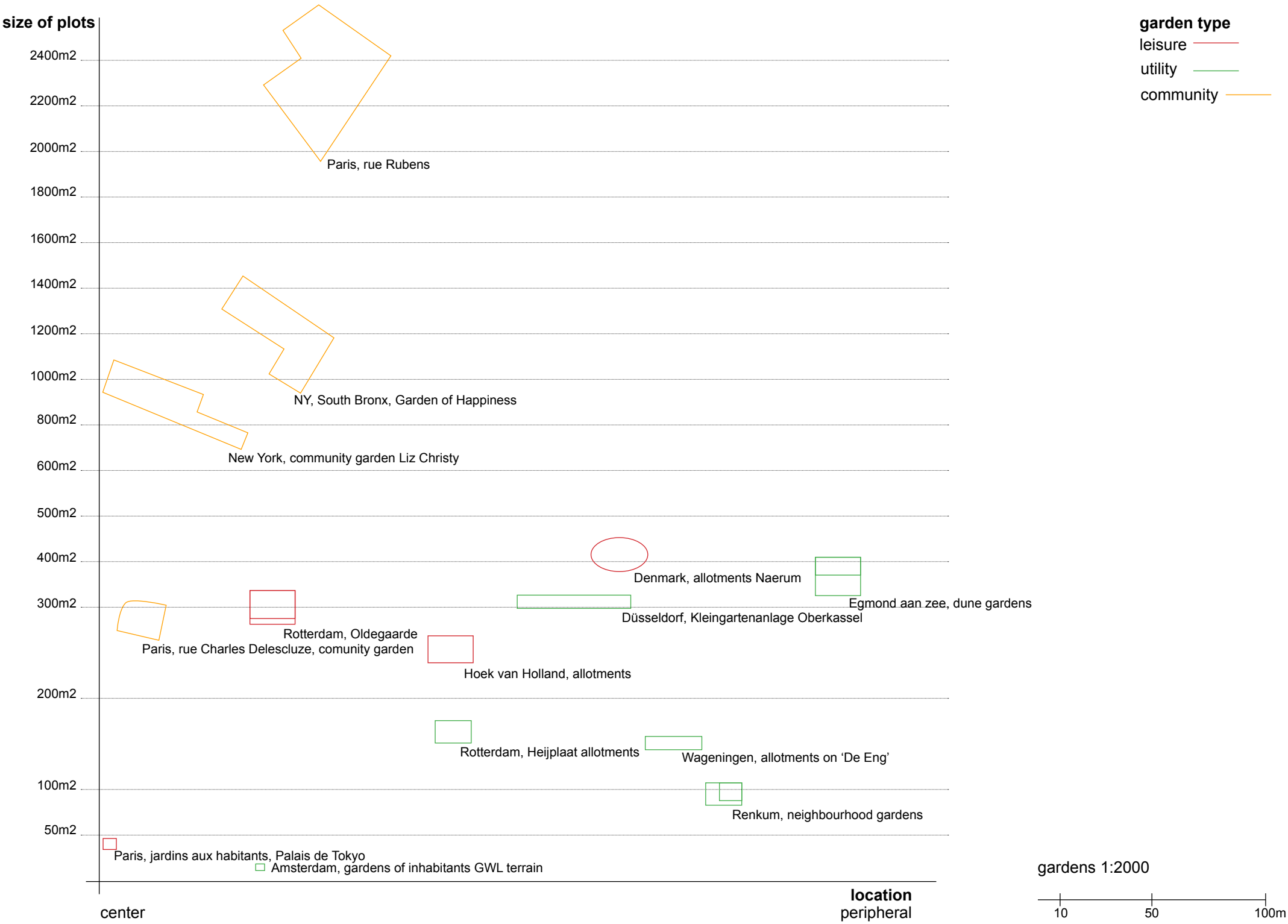
sanitation
- 

benches
- 

closed garden
- 

electricity

GARDEN LOCATION AND PLOT SIZE



project	location		features				organization					connection	
	situation	context	type	size total	gardens	size plots	access	borders	ownership	participants	aim		public/private
Paris, Rue Rubens/ rue du Banquier, neighbourhood garden		Paris, 13e, S-E, city centre, Asian quarter, framed by big avenues that radiate from Place d' Italy		incl other green space and pathways: 4529m2 <0,5ha, garden part: 2060m2, =45,5% of total space	1		Two entrances form streets	housing, walls, small fence	?	23 neighbours		(semi-)public path connecting one street with the other, private gardens from people living around	housing, green space of the block
Paris, F, jardins aux habitants, Palais de Tokyo, founded 2002, made by Robert Milin, plastic artist	gardens next to the sidewalk, alongside the museum	16e arrond, close to the Seine, lower street level than museum entrance	Gardens of inhabitants (jardins aux habitants)	garden part: 85m×6m= 510m2	16	+/- 30m2	via street	fenced with a low metal railing <1m	association of 16 federated gardeners, project was connected to opening of the museum	16 gardeners	give space to inhabitants to express themselves in the gardens	framed by public street space and public building	playground, common lawn, direct neighbourhood
Paris, F, Rue Charles Delescluze, neighbourhood garden on building lot	on an empty building plot, residential area	East of inner-city, young, vibrant, creative area, close to bigger shopping street	temporary community garden	15x18m= 270m2	1		from the streets via a gate with a key	fenced by high metal railings	the city/ municipality	7	Pleasure of gardening together, meeting people, extra events like dinners in summer	clearly separated, just participants can enter with a key, but everybody can watch the garden from the sidewalk	no
Düsseldorf Oberkassel, D, 'Kleingartenanlage' (allotment gardens)	on flood plane along the Rhine, between river and dyke	alternate with agricultural fields	allotment garden colony with sheds allowed	total area: 22ha, mixed with farming lands, gardens total: 15,8 ha = 72%		average of 300m2 variations of plots like: 15x20m or 6x60m		quite open, almost no fencing				open accessible walking paths from dyke to the river	agriculture, recreation
Naerum, DK, allotment gardens	allotment gardens at the south of the Danish village Naerum by C.Th. Sørensen, 1948	suburban, on transition to forest	permanent allotment gardens, with sheds	100x315m= 31500m2 = 3ha gardens: 47x390 =1,8ha =58%	47	ellipse 25x20m πx12,5x10=+/- 390m2	Via path from bigger street, no direct connection with	each ellipse shaped garden is encircled by a thick hedge from varying height, the complete garden complex is also fenced by a hedge and is bordered at the North by the North by houseings, by a road in the West and in the South East by forest		gardeners are people who live in a flat in Naerum, 47?	space for gardening and recreation, week end place	private oval gardens situated random in a public, hilly green lawn space that also serves as infrastructure/ path system, the negative of the allotment units is an important secondary space that is free accessible	no, independent terrain
New York, US, community gardens by Liz Christy				784m2 = <0.1ha	1								
Hollywood, US, allotment gardens													
Rotterdam, NL, Heijplaat allotment gardens	Heijplaat, an urban extension of Rotterdam, In between the village and the harbour/ Maas	in the middle of the harbour of Rotterdam	vegetable gardens	14300m2 = 1,4 ha	+/-65	average +/- 160m2	via one entrance at N/W side, that serves as exit, too, loop inside the area	of the gardens are transp. wire fence and roses, the whole complex is surrounded by a hedge or a wall	RBvVt municipality	multicultural gardeners, most of them live in Rotterdam-South		Semi-public: one can enter the garden area as a non- participant but the area is 1 hidden, 2 not on a route, 3 not really inviting	not directly
Rotterdam, NL, gardens in urban park, Zuiderpark	leisure and allotment gardens in a city park in the South of Rotterdam		3 garden complexes,	Park: 225 ha	1 Reyerwaard: 37 2 Zandweg133 3 Oldegaarde 55	Reyerwaard, Zandweg, Oldegaarde 250-300m2						gardens are situated in a public park and connected to it via public routes, the garden plots are private	linked to municipal park via path system, the park inhabits more functions as sport
Hoek van Holland, NL	allotment gardens in the hart of the village	surrounded by the diverse city districts	allotment garden 'colony', with sheds	180x170m = 30600m2 = 3 ha	>160	12x20m = 240m2							
Amsterdam, NL, park Frankendael	allotment and leisure garden complex <i>Klein Danzig</i> in urban park Frankendael		leisure gardens, school gardens and a vegetable garden+ greenhouse belonging to the restaurant	total (incl. water): 19,6ha restaurant +garden: 6000m2 school gardens: 8000m2 allotment part: 5,7ha						school kids, gardeners, clients for the restaurant, passer-by, walkers		the park is public, the allotment part and the school gardens are closed at night by fences, by day there is a path crossing the park+ allotment part	
Amsterdam, NL, GWL-terrain, former water supply area	residential area, urban villa's with gardens of joint use, density: >100houses/ ha, total: 600 apartments, 50% privately owned, 50% for rental	North West of Amsterdam, former municipal water board terrain, the area is car- free and	Total area: 6 ha	individual piece of land 12m2 (costs 30€/ year)	Inhabitants of urban villa's without outdoor space directly connected to their apartment (apartments above ground floor)							The terrain is connected to its surrounding by continuing routes	There are several facilities on the terrain as a restaurant, cafés, shops, school

Wageningen, NL, allotment gardens on 'de Eng'		8050m2 < 1ha	about 50	80-160m2	via a central informal grass path, 2.2m wide	open, gardens are fenced with simple materials as wired fence and wooden poles	municipality	about 50 gardeners			direct link to neighbourhood, link on transition of village and landscape
Renkum, NL, neighbourhood gardens	located on transition between village and landscape, abuts on golf course in the North	simple allotment gardens, no sheds or greenhouses					simple allotment gardens			open terrain, in the sense not closed by gate, but because seems to belong to residents next to it	gardens make part of a bigger nature reservation
Egmond aan zee, NL, 'Duintuinen'	gardens are situated in the dunes in the province North Holland, just next to the sea.	simple allotment gardens	area total: 104 ha gardens: 4.7ha = 4.5%	about 188	160-340m2	area is opened up for walkers and cyclists by a sand path, gardens are fenced and accessible for owners				public walking and cycling route, individual gardens	gardens make part of a bigger nature reservation
garden Swiss	in between building blocks, on former vacant lot, bordered by Prospect Av., Maple Av., E 181 St and E 182 St.	community garden: herbs, berries, vegetables, poultry.	1	costs: 30 dollar per year per bed for a member.	there are marked beds of 2x5m = 10m2			?		a fence divides the garden from the broad streets that run next to it	market connected to the garden and a grocery.

TABLE: COMPARISON OF GARDEN PROJECTS

CONCLUSIONS OF THE COMPARISON

Plot size and complex size

different garden types have different plot sizes: traditional allotments (nutstuinen), leisure/living gardens (verblijfstuinen) and inner-city gardens (community gardens)! Compare for example: 150m2 on allotments in Wageningen - 300m2 Oldegaarde - 375m2 of gardens in Denmark versus 12m2 gardens in GWL-terrain or 30m2 gardens, jardins aux habitants, Palais Tokyo: those in Paris are only 10% of above-named. The garden rue Delescluze = 270m2 = average leisure garden but it is a shared plot of 7 people with a key!

average size plot:
in leisure gardens 300-450m2
in traditional allotments 150-200m2
in gardens in (inner) urban environment 10-30m2
or no plots but collective garden!

average size of the total garden complex:
in leisure gardens >3ha
in traditional allotments 1-3ha
in gardens in (inner) urban environment 500m2 (from 270 to 4500m2)

Autonomy and connection

Often allotment garden complexes have no link at all with their surroundings/ neighbourhood, they are autonomous entities.
Connection and relation with the direct neighbourhood is important to legitimize the garden's existance and ensure that they are used and save, connection can be both spatial/structural and visual. The gardens should have value and be precious for their neighbourhood and give pleasure to gardeners as well as to non-gardeners!
Think of examples for connection: - the gardens rue Rubens, Paris pathway through gardens is public and functions as a shortcut for walkers! (spatial)
- gardens on Eng can be watched by their owners from their balcony,
- jardins aux habitants next to Palais Tokyo, Paris are just divided from the sidewalk by a low, transparant fence; a delight for all passengers! (visual connection).

Traditional structure of allotments is the grid! It is the most efficient use of space. Clear arranged. Good to keep order when many people are gathered on one place. Division of public and private.

Informality and contrast

the informal world that one finds oneself back on peripheral allotments like on De Eng in Wageningen or in Renkum is charming and inspiring, pure, light.
It would be interesting to keep the wild image also in the city! to search for a new type of language in the public space: a different image of green in the city!

stedelijk (buitenland)

Parijs, rue Rubens/rue du Banquier, buurttuinen

Gemeenschappelijke tuinen midden in sociale woningbuurt, 23 deelhebbende tuinders. De tuinen zijn gekoppeld aan een open grasveld en speel-voorzieningen. Erdoorheen loopt een (semi-)openbaar pad (via hek toe-gankelijk) dat doorsteek van de rue Rubens naar de rue Banquier is. Vanwege het doorlopende pad en de andere voorzieningen wordt het terrein niet alleen door de tuiders begaan en gebruikt maar door meer mensen uit de buurt en zelfs van daarbuiten. Een contrastrijk beeld van kale hoogbouw en schitterende tuinen daar midden in. Een bonte achterwereld tussen de bouwblokken die men vanuit de straat niet verwacht.

Parijs, jardin aux habitants, Palais de Tokyo

Gemeenschapstuinen direct naast een openbaar gebouw (Museum voor moderne Kunst en kunstenaarswerkplaatsen), tussen stoep en gebouw in. Bloemenpracht aan straat, alleen door een klein hekje afgeschermd voor alle passanten een genot.

Parijs, rue Charles Delescluze, buurttuin op bouwplot

Temporele tuin op een momenteel onbebouwd plot in het midden van het levendige 11de arrondissement. Het is het enige grotere begroeide stuk grond in deze omgeving van hoge dichtheid. De tuin is van een hoog hek omringt en alleen door deelnemende bewoners met een sleutel toegankelijk. Er worden ‘s zomers gemeenschappelijke etentjes gehouden.

Kleingartenanlage Düsseldorf, Oberkassel

Vrij oude Kleingärten in lange stroken, afwisselend met landbouwgronden op de overstromingsvlakte bij de Rijn. De tuinen schijnen ’s winters vaak onder (rijk rivier-)water te staan wat hun geen afbreuk doet (of de tuinen zelfs ten goede komt wat betreft bemesting). Mooie locatie aan de Rijn voor de dijk van een van Oberkassel’s meest prijzige woonstraten, aan de overkant van de stad Düsseldorf.

Denemarken, volkstuinten Naerum

Bijzonder volkstuintencomplex van Sørensen waarbij rond 40 tuinen als ovalen (van ca. 25x15m) los in de ruimte zijn geplaatst. Iedere tuin is keurig door een dikke haag omgeven en heeft een huisje. De hagen variëren in hoogte en bieden soms toezicht, soms niet. Door de ongebruikelijke ovale vorm van de tuinen (vergeleken met het veel voorkomend rasterpatroon van volkstuintencomplexen) blijven er onregelmatige tussenruimtes van gras over. Deze restruimtes zijn vrij toegankelijk en zouden aan bredere plekken ook voor gemeenschappelijke activiteiten (sport, BBQ, feesten enz.) kunnen worden gebruikt.

New York, community gardens van Liz Christy jaren ‘70

Braakliggend terrein door bewoners bezet en tot tuin omgevormd. De eerste community garden in NY en de start van de green guerilla beweging, geïnitieerd door Liz Christy . De tuin is tegenwoordig nog aanwezig! Simpel materiaal, bijzonder resultaat.

Hollywood, volkstuinten

Midden in een villa wijk met anders alleen swimmingpool tuinen. Fijne onderbreking van het zich eindeloos herhalende patroon van villas. Tuintjes geven een gevoel van menselijke schaal naast al deze praal. Fascinerend is de absurditeit van volkstuinten in het midden van de villa wijk, ik vraag me af wie er tuiniert.

stedelijk (binnenland)

Rotterdam, Heijplaat nutstuinen

Een van de kleinste bestaande volkstuintencomplexen van Rotterdam, met een heel bijzondere ligging midden in de havens. Hier treft men met name vreemde nationaliteiten (Surinamer, Kaapverdianen) aan, die allen in Zuid wonen en hier ook hun (landes-)eigen groenten verbouwen. Het is een structureel eenvoudig en licht complex, de tuinen zijn vrij groot en kennen maar een transparante afbakening met draad en rozen. De sfeer hier is heel anders dan op andere (en vooral de verblijfs-) complexen van de stad. Uniek voor Rotterdam met alle cruciale kenmerken van de stad: haven, veel wind, arbeiders, multicultureel, zelf aanpakken. Opmerkelijk zijn de zelf gebouwde kassen en opstallen van alle denkbaar en vindbaar materiaal.

Rotterdam Zuiderpark

Het park bevat 3 volkstuintencomplexen. Kort geleden is de structuur van het park aangepakt en zijn er ook paden door de volkstuinten heen gelegd om deze meer bij het park te betrekken en voor passanten te ontsluiten.

Hoek van Holland

Volkstuintencomplex als centrum van de stad. Het werkt als het ware mee met de verschillende stadswijken.

Amsterdam Frankendael

Interessant en werkend voorbeeld van het samengaan van een stadspark met volks- en schooltuinen. In het park wederom bevindt zich een beter restaurant, de Kas (een hotspot in Amsterdam), waar de gerechten zijn bereidt met eigen verbouwde groenten uit de moestuin die eromheen ligt. Goed statement, je weet er wat je eet

en waar het vandaan komt. Men begrijpt de cyclus van groeien, oogsten, bereiden, eten en genieten.

Amsterdam GWL-terrein

Per woonblok zijn er in dit plan én privé- én collectieve tuinen. Een sterke hagenstructuur raamt de tuinen. Stevige structuur/stevig ruimtelijk concept van openbaar (paden en verharding) naar semi-openbaar (collectieve tuinen, meestal door een hekje bereikbaar) en privé.

overgang stad of dorp en landschap (binnenland)

Wageningen, volkstuinten op de Eng

Op voormalig landbouwgrond wordt er nog steeds door diverse Wageningers groente verbouwd. Zeer charmant beeld op de open eng tussen heuvelrug en dorp in. Veel tuinders wonen in een van de naastgelegen flats, die geen tuinen hebben. Toch zitten ze maar op enkele meters af van hun volkstuintje en kunnen ze er zelfs vanuit hun balkon naar kijken. De tuinen zijn heel mooi puur, zonder toevoegingen als huisjes en kassen. De plots worden door graspaden gescheiden en de tuinen zijn door een dun hek van kippengaas en houten paaltjes afgegrensd. Er zijn voornamelijk nutstuinten gemengd met bloemen. Het special is een grote pluktuin, waar een ondernemer speciale (niet in bloemenzaken voorkomende soorten) kweekt. Van eind mei tot de eerste vorst in oktober is de pluktuin open en kan men er zelf een barok boeket komen snijden.

Renkum, bewonerstuinten

op dorpsrand, aan golfbaan gelegen. Traditionele volkstuintjes zonder opstallingen, mooi informeel, transparante afscheidingen met hout en gaas en graspaden door de tuintjes. Licht wilderig. Bewoners hebben toezicht op de tuinen, en het complex is vanuit de straat open toegankelijk.

Duintuinen bij Egmond aan zee

Waanzinig fenomeen van moestuinten in de duinen. Voor het arme vissersvolk in Egmond waren de tuinen nodig om er hun aardappelen te verbouwen. De tuinen liggen allemaal onregelmatig door de duinstreek verspreidt. De kleine goed onderhouden, gecultiveerde stukjes land contrasteren behoorlijk met het ruige schrale duinlandschap. Vanuit het dorp Egmond aan Zee loopt er een pad doorheen dat overgaat in een natuurgebied dat zich tot het volgende Noordelijker gelegen badplaats Bergen uitstrekt.

tuin Zwitserland

Een (ruimtelijk) niet direct aan een huis gerelateerde tuin ligt vrij op het weiland en maakt de oorsprong van de term tuin alle eer. De tuin als omheind stuk land. Hij hoort bij iemand.

Critical review of garden components

Every garden requires a basic equipment/has standard requirements, first to be a garden (to fulfil its definition) and second to function (to be a working entity). Based on the observations that are made in the comparison of several garden complexes and types in different situations (see part I) garden components are classified according to the following groups:

1 enclosure/exclusion, 2 access/passage, 3 storage/shelter, 4 gather/interact, 5 plants/crops, 6 tools/help, 7 irrigation/drainage, 8 waste/refuse/recycling *9 balconies/roofs.

ENCLOSURE AND EXCLUSION

A border whether fence, hedge or ditch, serves the protection of the garden - from animals and people not belonging to it - and at the same time it creates a private place for the gardeners. It marks their terrain. a demarcation that works in two directions. First, as partition of inside and outside and second, as the separation of outside from inside. the border is an enclosure and an exclusion in one/the border encloses and excludes at the same time. It is about keeping unwanted things/ something outside and at the same time create a convenient/cosy/screened/shielded place inside. Functioning physically, visually (and mentally), a border can be done in a very open way or with heavy elements. A border can be transparent, what means that the garden behind is visible or closed what means that the inner part is (visually) disconnected from the outside. Both versions can have their advantages in different context. Whether made of natural or artificial material makes a difference on safety/ strength and has influence concerning to the belonging of the fence (is it part of the garden or part of the public space?). Typical garden borders are fences made of wood, wire, steel, hedges or ditches. Often one finds combined borders, like a ditch next to a hedge, or a hedge growing through a fence.

Next to excluding and enclosing the border should include (more things).

A fencing thus is less repulsive when it integrates other functions like sitting, growing, playing facilities. Then the border becomes a space of its own or even a link in between things, a ‘landscape’ of itself.

Multifunctional borders/ a new way of defining borders are a challenge in public space! In connection to that also buffer zones should be considered and studied.

ACCESS AND PASSAGE

both take shape in/are realized in pathways. the difference is that one leads people to a certain destination while the other wants them to pass-by. The first is for people that aim to stay and the latter for people that move along: two different dynamics – one stays, plant, dig in the ground, do the weeding while others rush along.

The materialisation and dimension takes part in giving the path one of these functions. Whether paved or unpaved, small or broad, formal or informal looking it gives a message/sends a signal to different people if they can enter or not. Together with borders the pathways determine what is public or private. Access often crosses a border, while passage follows the borders/runs parallel to the border.

BUILDINGS

like the shed, a greenhouse, hot bed, or the cottage/cabin, the community house/ club house, the canteen.

buildings in the garden have very practical reasons. one needs a place to store the tools, to shelter when it rains or to keep vulnerable plants in winter or to raise plants until they are strong enough to be exposed to the rough climate outside. normally on garden complexes also a common place was established, such as the canteen or club-house. it was a place to gather and for festivities like the harvest festival.

THE SHED - STORAGE AND SHELTER

encompasses different sizes/dimensions related to different purposes and functions. the smallest size is exclusively meant for storage of tools. with extension of size, it can house more functions. then it can be used for growing plants at an early stage or in the winter or it can serve as shelter. so it becomes also a greenhouse or a living room. noticeable is that there is a tradition of building the shed oneself and that most garden owners want to make something personal out of their shed.

It gets interesting when the shed is changeable – like extendable in size, usable in different ways etc. In the public space a big amount of garden houses (like the one of the verblijfstuinen in Rotterdam) is not desirable. The location of the new gardens in direct living environment makes garden houses to stay over redundant anyway. It depends on the organization of the gardens but one should think of a common shed that the gardeners share in stead of multiple individual sheds. Sharing tools is economical and depending on the quantity of gardeners one could introduce a locker system for personal belongings. When bigger in scale it can also serve as a general meeting place, a place for cultural purposes like playing theatre, dancing, making music, having dinner together and more. The building and its placing can play an important role of organisation and division of the space. It can be part of the border for example or function as a central place.

COMMON PLACE - MEET AND INTERACT

Usually a meeting place and or playground is integrated in a garden complex. As an open lawn or including facilities like a football field, it is a place to gather. In stead of individual belonging this is meant for a community – that can be different groups that meet here with a certain intension. A place of interaction between different people – young, old, gardener, non-gardener, male, female, child, teenager....it has to be a place where one can sit, play, cook/bbq, have a party, make music, dance, rest, talk, look, exchange crops and harvest and so on. the more defined the place is concerning the design the more determined is its use. for example a football field is clearly for playing football and not for a picnic.

Concerning new gardens one could consider the common place as a place where gardeners and non-gardeners come together – whereas it used to be just for members of the garden league. it should be a linkage/liaison of garden and urban context, of gardeners and non-gardeners, of inside and outside. common places in the volkstuin+ ask for solidity and openness, so that people are - until a certain limit - free to use it the way they want or at least have an influence on the design and set-up of the place. In that way one could provide loose and multifunctional elements that everyone can move or re-arrange – just in the way a certain situation/ moment and constellation of users demands for.

PLANT AND CROPS

A garden without plants or crops is not a garden. Besides the enclosure, the planted material is essential to make a garden what it should be. Originally the allotment served the self-supporting/self-sufficiency of one family and therefore primarily consisted of edible plants. they were neatly organised, aiming at maximum yield. But still, people embellished their garden also with flowers. Not without reasons, flowers and herbs for one thing attract useful insects that control pests/vermin and for the other they can keep away slugs. The more the allotments became leisure gardens, the more the utility plants disappeared from the gardens. In stead of cabbage, potatoes and carrots a nicely mown lawn and Dahlias dominated the overall picture of the plots. however, now there are more and more people appreciating to grow their own vegetables because they can influence what they eat: you know what you get!

a balanced mixture of edible and ornamental plants is optimal for the garden and for the people to not only enjoy the harvest but also visually enjoy the garden.

in the new gardens people should be free to grow what they want.

TOOLS AND HELP

gardening asks for two things, first: a gardener, second: tools. a garden has to be planted and maintained. first of all the soil has to be prepared for sawing and planting: one has to turn over/spade the garden and manure it. after sawing and planting one has to take care of the plants, thin out, give water, take the weeds. when fruits are ripe they have to be picked and edible plants should be harvested. through all the year enough to do.

as long as men exist, they take advantage of helps to get their food. by using sharp stones and stocks, they went hunting and kept on advancing their tools. with one's bare hands only, one could never achieve a satisfying garden. there are tools, that ease/simplify the garden activities/work and make them more effective. next to that there are helps, that accelerate respectively facilitate plant growth and increase yield or harvest. think of standard equipments as spade, pitchfork, watering can, hedge trimmers, that did not evolve since centuries still basic, still effective. besides these working tools, gardeners build constructions that help/ better/fasten plant growth e.g. a ranking frame, a hotbed, a greenhouse. also net/ mesh is useful to protect plants from animals that pick their seeds or fruits.

various helps can be made of few elements from the same materials but serve different aims.

IRRIGATION AND DRAINAGE

the basic chemical reaction by which plants grow is called photosynthesis. they need primarily water and sunlight to produce sugars for their cells:

$6 \text{ CO}_2 + 6 \text{ H}_2\text{O} = \text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{ O}_2$ _ Carbon dioxide + Water + Light energy = Glucose + Oxygen.

without water no growth, so one has to give water to the plants in the case there is not enough rain or water in the ground. therefore one can or collect rainwater, or pump up soil water, or needs a connection to the drink water system. the opposite case, too much of water can destroy the harvest and is not wanted neither. thus drainage is also necessary. in Rotterdam one can find extremely high levels of soil/ underground water that have to be regulated. usually this is done by ditches that structure a garden terrain.

the water tab on the allotments garden is a typical meeting place, where one meets each other.

*BALCONIES AND ROOFS the top layer _ a different level

Because in Rotterdam open space is extremely unequally spread: in the South of the city there is way too much, but the old centre there is very few, one has to search for different solutions, other suitable locations for new gardens.

letting go the traditional image of gardening that is soil-bound, one increases the number of possible locations for new gardens. think of a second layer of gardens above the city's streets. Up on balconies and roofs, there lie enough opportunities for intimate, calm spaces, far away from traffic, passage and noises. often those places have (already) limited access, so that in this case no borders would be needed. the border/exclusion arises automatically by the difference in height (in between) gardens and disturbing factors. opens up new opportunities and enrich the variety of gardens.

UPSHOT: GOALS FOR THE VOLKSTUIN+

Gardens need few objects/tools/materials to subsist. the history of allotment gardens shows us the evolution of a very simple garden type, that was based on utilitarian reasons. It was a garden for the people and they enriched it with their creativeness/inventiveness that came out of limitations/restrictions by poverty/little money. A garden is designed/made by its owner. The aim is not to be provided with a ready or fully furnished plot but much more to have an empty plot within a frame that gives people the space and freedom to make their own environment.

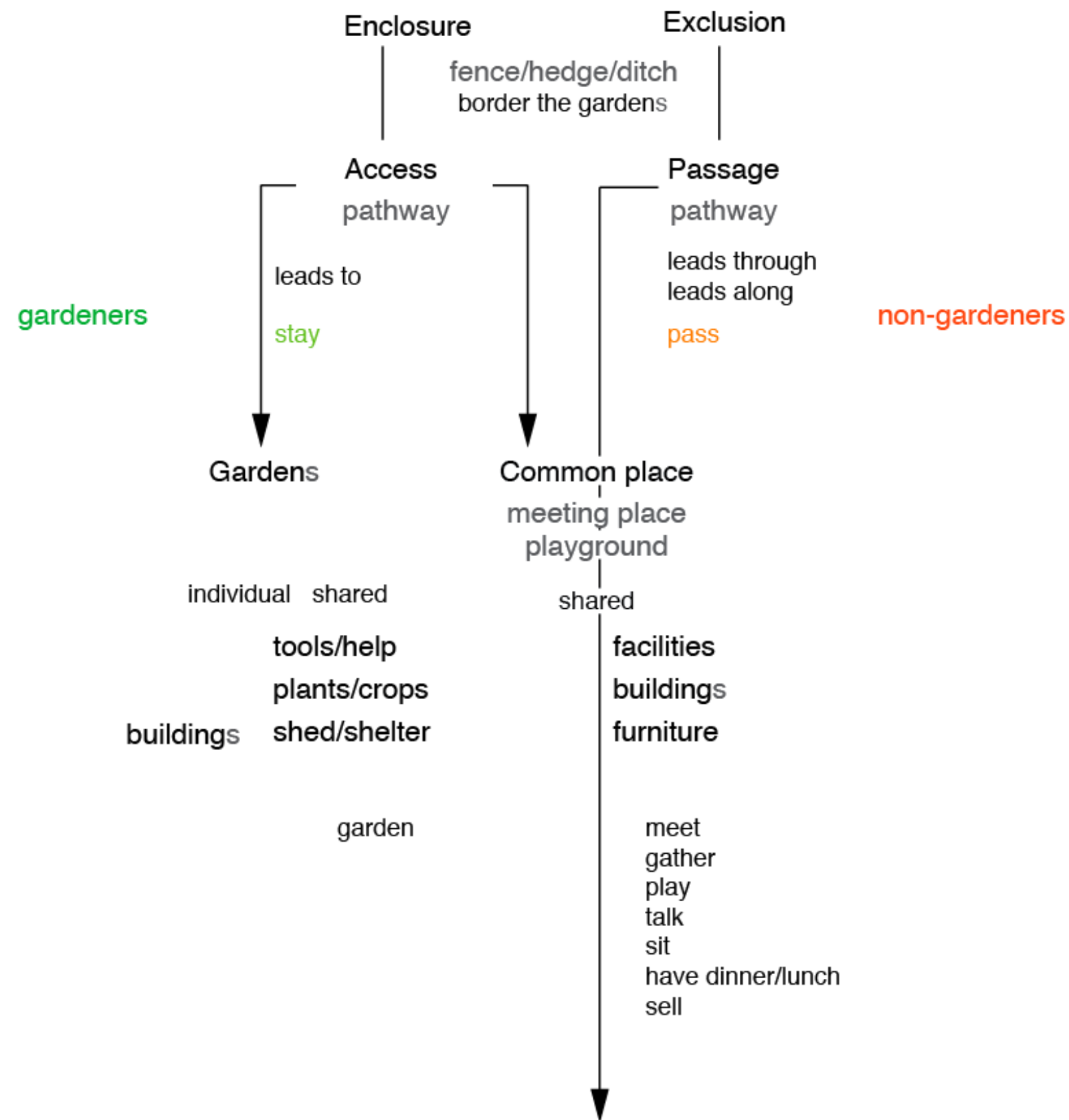
One condition for the new gardens could consequently be, to consist of a limited/minimum amount/number of components and materials. To still achieve a variety of gardens and a substantial contribution of the gardener(s) the reduced components should open up a range of possibilities concerning use and composition. Thus they have to be simple and multifunctional. New garden components should not fit in just one group, so that for example one and the same component serves the access but is at the same time is a border. The interaction of different types of components is crucial.

A garden should consist of practical elements. the design of elements and tools can be led by the process of gardening and also human measures have to be taken into account.

What is the maximum height one can reach for (to trim, harvest), what is a convenient height to work (hot bed at knee height)? one can easily bend for knee

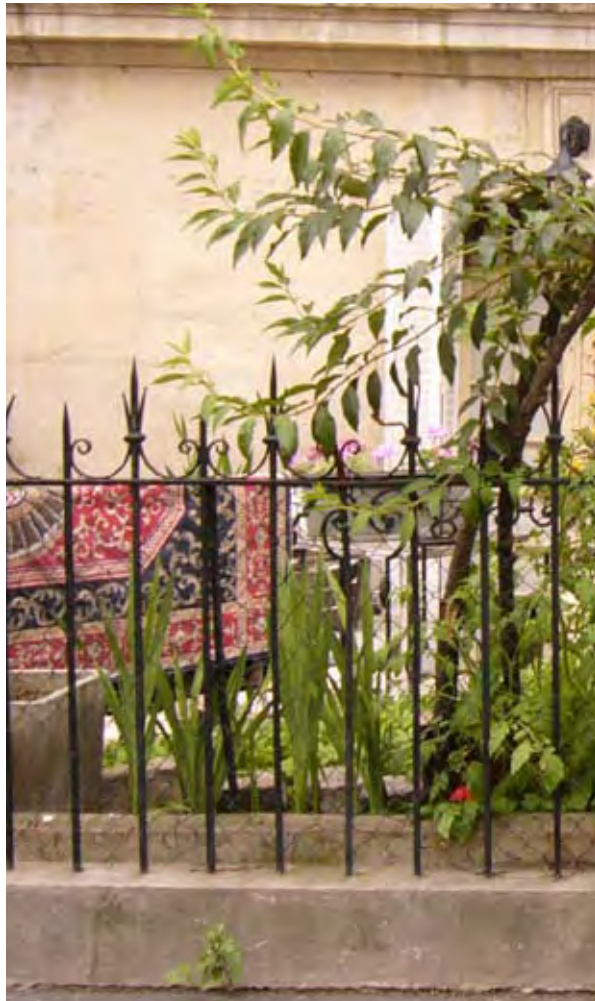
height (so hot beds or raised beds), what is seat height, too. beds should be about 1,20m broad to reach/till easily from both sides this is derived by an average arm lengths of 60cm.

Rotterdam needs an instance/authority/agency that provides as well basic needs for the gardens as lay out/construct a general framework of pathways, trees, ditches, sanitation.



1 Enclosure and exclosion

to ensure a personal place for the gardeners that is protected from wind, dust and the urban public.





1 wall _ bricks, overgrown with Hedera helix, about 4m, separates the yards of social housing and the community garden. a strong barrier not to break down or to over win.

2 stockade/lattice fence _ tall barrier (about 3m) to shield the terrain from intruders. through the thin gaps in between the laths one can get a glimpse of the wasteland behind. inner and outer world are in that way lightly connected.

3 paling _ wood, knee-height, with the name of he garden plot fixed on it: ‘Zur alten Liebe’ (translated: to the old love), the message communicated something romantic of the past. is the garden the past romance? like a recover of lost Eden?

4 fence _ wooden poles and iron wire netting. indication of borders of the plot. amateur-like constructed by gardeners. very transparent, one can see the gardens. in the row there are different heights and diverse small gates build in that mark the property of different gardeners and add sth personal.

5 wire fence + rose hedge _ borders the gardens of Heijplaat, Rotterdam to protect them from animals. 1m high, overgrown by roses that adorn the simple fence with their red flowers. almost the only ornamental elements in the otherwise functional vegetable gardens. nice to see, bad concerning the production because the roses attract vermin as a gardener told.

6 wall + fence _ as separation of sidewalk and the jardins aux habitants next to museum Palais Tokyo in Paris. hip-height, first a 30cm border form concrete and then an iron railing with iron wires on top. the gardeners attached flowerpots to the fence. clear distinction between public and private (collective), but in a sympathetic way. passengers can look the gardeners in action and enjoy the floridity.

7 iron fence _ straight sticks of approximately 1.20 m height fixed on a low

edge of concrete. the iron bars seem to be forged and have a subtle ornament/embellishment. French. it divides the front garden of the Parisian houses from the sidewalk. physically clear but transparent concerning the view.

8 fence wood and iron wire netting _ self-made, hip-height, some pillows of wood beaten into the ground and two wooden laths stuck horizontally to them. one at the bottom, one on the top. for more stability and also to keep out animals, there is a wire mesh/chicken wire added. this fence is easily to deconstruct. it functions on already semi-public terrain like this allotment garden entity, just to mark the gardeners personal plot.

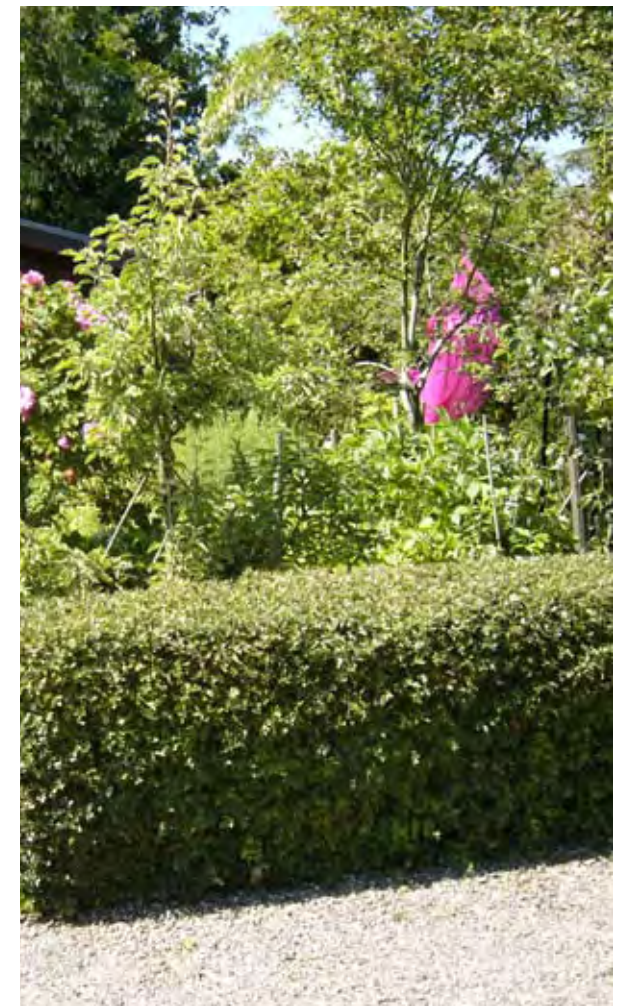
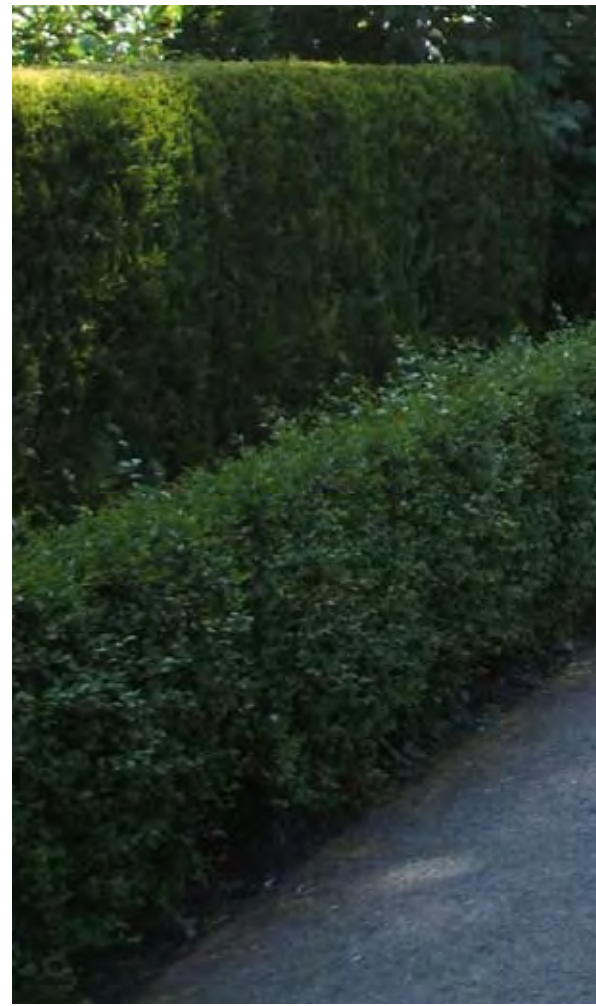
9 wired fence _ held by wooden stakes, very transparent, and vulnerable fencing of the garden. plants are ranking on it, when overgrown the fence is barely visible. it is flexible and easily to built or to remove.

10 low palings _ knee-height, <0.5 m, accompanies the pathway through the gardens to protect the shared garden from passengers. it is easily to jump and just a separation of different dynamics, the passing people and the ones that stay a while to garden.

11 green fencing _ lacked metal, like usually seen in public spaces as playgrounds, schoolyards and similar. 2m high, the gaps are so small that it is difficult to place a feet to climb the fence. surrounds a community garden on empty building plot, participating gardeners have a key to enter.

12 fence woven of branches _ 1.2m height. as leftovers from tree cutting, it fits naturally into the garden context. discreet but strong and dense. a construction of two facing vertical poles forms the frame and is filled up by the horizontal branches. similar to a wall but a more gentile material that attracts insects and birds.





1 *Taxus baccata*, 2 *Acer campestre*, 3 *Buxus sempervirens*, 4 *Salix alba*, 5 *Crataegus monogyna*, 6 *Carpinus betulus*, including a bench, preferable three different heights: knee, 50cm, shoulder 1,50m, above head 2m+

7-9 Brambles: *Rubus*, 10 *Salix alba*, 11 *Carpinus betulus*: a green gate, 12 *Carpinus betulus*, lowered garden chamber.





1 *Taxus baccata* _an evergreen hedge, neatly clipped on above eye-height. 40cm/50cm thick, dense structure, opaquely. encloses the garden space and makes a hidden, very intimate place out of it. from outside the garden is not perceptible.

2 *Acer campestre*_ accurately cut, above eye level, coarse, defines enclosed chambers and gives visitors no chance to experience the garden world but hides it and keeps it secret.

3 double hedge _ *Buxus sempervirens* and a conifer. the buxus belongs to the general structure of the garden complex 'Oldegaarde', Rotterdam. because it has just a low height of 60cm, the owner of this plot erected a second hedge that completely shields his garden from watchers, who pass by. the different structure and hue of the two parallel hedges together is effective, but this plot compared to others, that open themselves charmingly for glances of passers-by, appears rather blocking than inviting.

4 *Salix alba* _ 2 m high, screens - here the shed - for wind, it has a fabulous fresh green in spring that changes later into nearly silver. in the Netherlands a commonly occurring enclosure of farmers lots, naturally growing in water meadows, along streams and rivers. also used for fixing the ground/soil. it would also fit in Rotterdam's gardens.

5 low hedge _ *Crataegus monogyna*. 0.6 m high, allows a nice view on the gardens that it frames. directs people to stay at the pathway but does not block them from the gardeners. No hard border, suitable in more calm areas or in direct neighbourhood of houses where the inhabitants can watch the space.

6 *Carpinus betulus* _ including a bench to sit down, have a break and watch passing people, becomes rust brown in autumn and loses (not all) leaves late.

7-9 *Rubus fruticosus* _ thorn bush, attached to wire that is strained in between wooden poles. extremely effective in keeping away unwanted guests. very robust plant that is often one of the pioneers on waste lands. it contrasts with the hedges on allotment garden complexes that are accurately brought in form and has a fresh wild character. easily to maintain with a rigorous cutting once in a while. the shrub gets white flowers in June/July and its berries can be harvested in August-October to cook a tasty marmalade.

10 blue net + *Salix alba* _ protects the loose garden plots within the rough dune landscape from harsh winds and sand. it clearly marks the area where man involves the landscape.

11 Green gate Südpark Düsseldorf_ *Carpinus betulus* mixed with *Acer campestre*. Invites into the green realm/domain. As having no gate it is open. still an indication for people about entering a different space than the urban park area they come from.

12 big scale hedge *Carpinus betulus* _ framing a garden that bridges two street levels and is included in a public park in Berlin.

1+2 ditches have the quality of defining and bordering a terrain without restricting the view on it. here, in the Westerpark in Amsterdam, the allotment complexes are difficult to enter, because they are split from the public park system by a broad ditch that is just at one place bridged. The allotment gardens can be compared with a typical dutch polder , with an own grid structure of ditches and canals that provide drainage as well as water storage. The framing ditch is about 3m broad and is joined by a pathway and a row of pollard willow that makes the polder image even stronger.

3 ditch _ at the back from the garden plots in the Zuiderpark, Rotterdam. about 2m broad, straight with a concrete border. a public foot- and cycle path that short-cuts through the allotment complex form park to city allows a look into the personal garden plots, where one can see people working on warm days topless sweating to maintain their plot. One cannot jump the ditch, like that it is a barrier for people as well as for cattle.



ditches 1 + 2 Allotment gardens Westerpark, Amsterdam, 3 Zuiderpark, Rotterdam

2 Access and passage

to bring people into and let people pass and enjoy the gardens

1 sidewalk _ along jardins aux habitants, Palais Tokyo, Paris. normal, 2.5m broad public sidewalk that allows public and collective direct next to each other. everybody that has to pass here can enjoy the gardens by seeing and smelling them. unique in the centre of Paris.

2 Pathway through GWL terrain Amsterdam, as public routing through neighbourhood, fringed by the lush hedges of the gardens. pavement: bricks.

3 informal track _ through dune gardens near Egmond aan zee, North Holland. reminds of a country lane. two trails of sand lead people through the landscape. also suitable for bicycles and moped.

4 tiles _ accessing an allotment garden. can be easily removed or changed.

5 path _ Heijplaat, Rotterdam. 1,5m, paved, at the side supported by a concrete edging at one side and bricks at the other. there is a thin unpaved stroke in between plots and path that are wildly grown by all kind of plants. the path belongs to the common structure and has to be maintained by the gardeners in ‘algemene werkbeurten’, obliged working turns.

6 natural grass path _ belonging to allotments on fields in Wageningen. width 2m, soft and wild in texture, not meant for heavy use or constant visitors. only brings the gardeners to their plot.



1



2



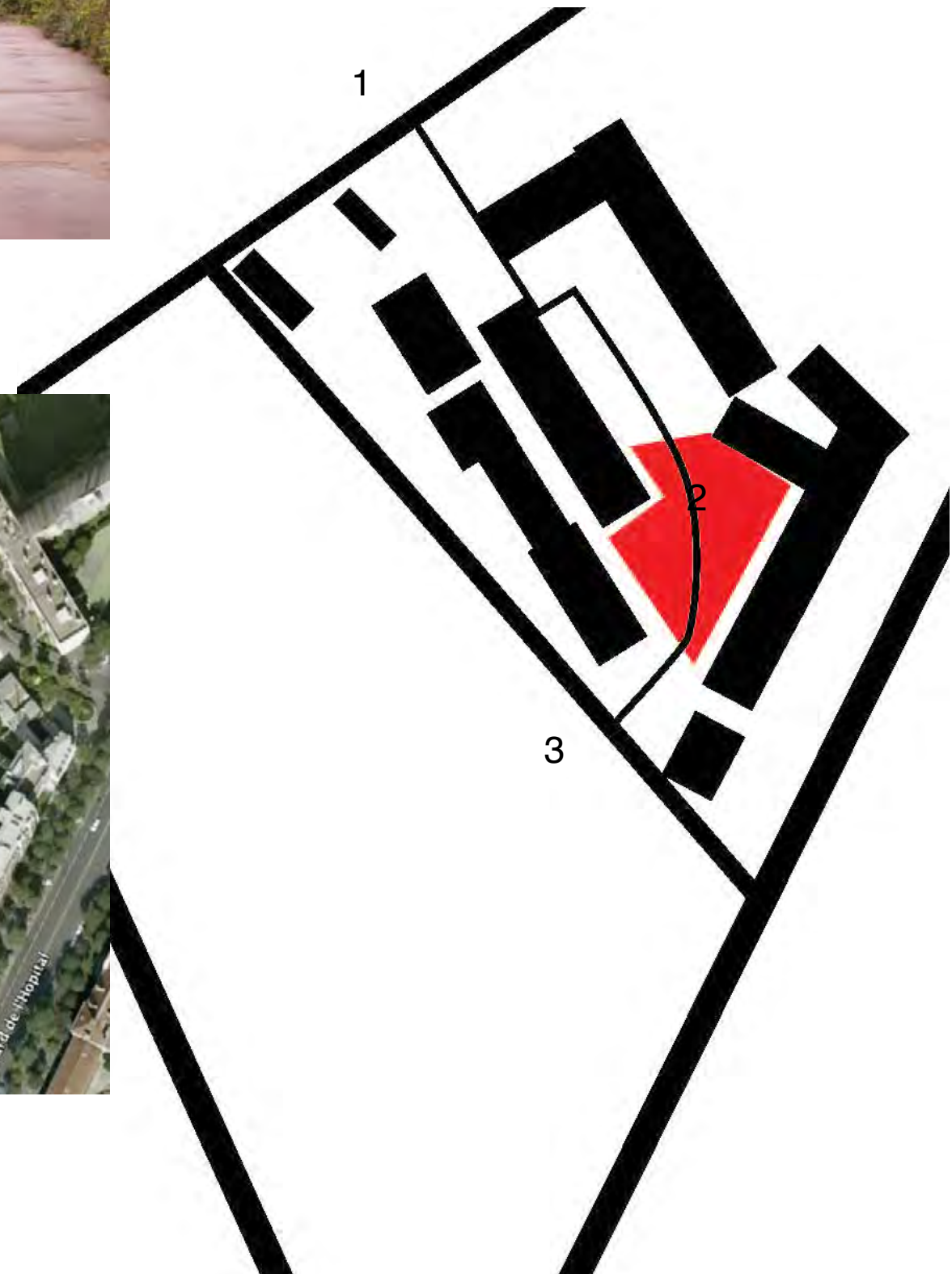
3



1 entrée Rue du Banquier_ jardin near Place d'Italie, Paris.

2 pathway through the jardin _ functions as a short-cut from one street to another
(see plan below)

3 Rue Rubens _ the other entrance of this neighbourhood garden, can be closed
at night.



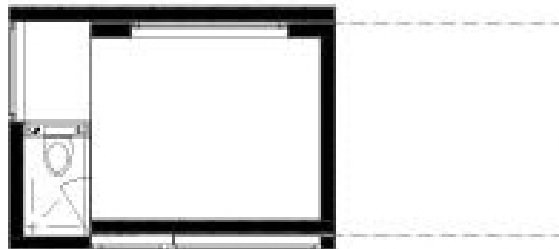
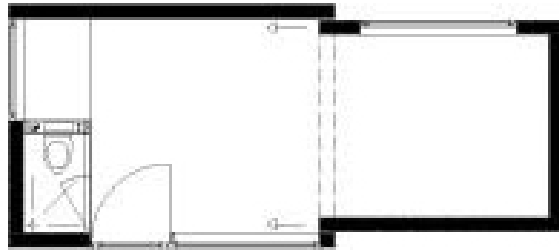
3 Shed and shelter

to keep gardening tools and to shelter when bad weather.



1 uniform sheds in early allotment gardens Rotterdam, 2 DIY shed, Heijplaat, 3 greenhouse, IJburg, Amsterdam, 4 Caravan for living, Wageningen, 5 shed, dune gardens, Egmond aan zee.





3 x 3 x 3m

1 volkstuinhuisje _ of the sixties in Rotterdam. +/- 4x4m, big windows, swing doors, already meant for living in it. quite luxury, and transparent. prefab elements, all the same on the complex.

2 green shed _ Heijplaat, self-built of wood, painted green, roofing: (bitumen) felt. 2x2 m, 1 small window, a side door, purpose: storing tools.

3 small greenhouse _ Ijburg, Amsterdam. construction: glass, steel. used for storing tools, and growing plants until strong enough to put in the ground outside.

4 Caravan _ self-built, with a small stove inside,

5 shed Egmond aan zee _ extended by a wooden wall to break the wind

6 Prefab by Otto Kaufmann _ extensible prefab shed 3 x 3 x 3 m. material: timber. consists of two boxes, one inside the other. the surface can be almost doubled (from 9 up to 16 m²) by pushing out the box, that is plugged in the first.

7 containers _ stapled Rotterdam, harbour. characteristic element of the city.

8,9 container sheds _ colourful transformed containers, 2 x 2m, with a long overhanging front roof that creates an outdoor space that is protected from rain.

nice and simple, also adaptable in Rotterdam. (example from Bordeaux, F)

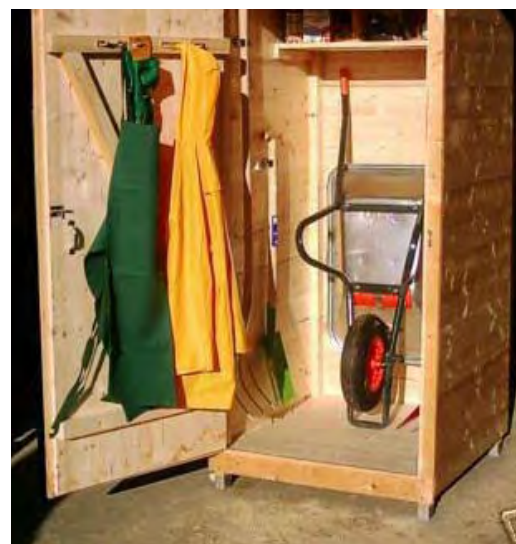


6 extendable *Prefab Fred*, Otto Kaufmann





sources: 1 <http://encrecouleurs.blogspot.com/2009/04/maria-hofker-rueter.html>, 2 <http://www.yatego.com/hgm-herm-hut/pdf,44c73692129c3,gerätehäuschen>



left page: greenhouse _ Heijplaat, Rotterdam. a covered, transparent indoor garden. equipped with pots, water can and soil to grow plants in early stage. the work in the greenhouse starts before the garden work. the glass creates a tropical climate where the plants grow even in winter and much faster than outside – to the delight of the gardener.

from left to right: 1 garden house, Amstelglorie _ wood, owned by Maria Hofker-Rueter (1902-'99), who draw and wrote about her garden. her atelier was an upgraded shed, equipped with everything she needed. even suitable to stay over in the summer months. she placed a bench central, right in front of her garden house to observe her garden from the shadow and paint it or write something about it. painted dark green the house blends in the vegetation. this is a shed de luxe that is not apposite on smaller terrains in the open urban public.



source: 3 and 6, foto: Bot, M., 1977, stadsarchief Amsterdam.

2 wooden shed _ 1x1m, 2m high, takes up minimal space. developed out of a traditional toilet house. exclusively used for storing tools. indispensable for garden work.

3 contractor's shed _ used in the garden. No windows, unsuitable to stay inside. just for the storage of tools and garden furniture. attached to a trailer hitch of a car it is transportable and movable from one location to the other.



5 very inspiring DIY sheds/greenhouses Heijplaat Rotterdam. constructed of all kinds of materials that one can find in the bulk garbage/elements not needed anymore of the house. somehow put together and painted according to the owners aesthetics. the advantage is a green indoor garden, even in winter.

6 self-made shed _ of the 70s, Amsterdam. made out of wooden board, glass and doors. 2.5 x 2.5 m. people have obviously pleasure of building their own shed. it is a place to stay, to take a break and watch at the work that is done.

1-3 greenhouses Heijplaat, 4 DIY shed, foto: Bot, M., 1977, stadsarchief Amsterdam.

4 Meeting and interaction

to meet, talk, play, sport. for non-gardeners, too!

1 common place _ allotment complex in Amsterdam, dead lawn with a horrible decor of a sculpture and flower pots, looks like an entry of a graveyard, deterrent picture. bad example.

2 common soccerfield _ idem complex in Amsterdam, where the lawn at least has a function: to play football. better.

the following pages will show a more broad collection of elements also from spaces outside allotment gardens, serving as an inspiration for the volkstuin+.





1,2 soccer field _ fenced, Wevershoekstraat, Rotterdam South.

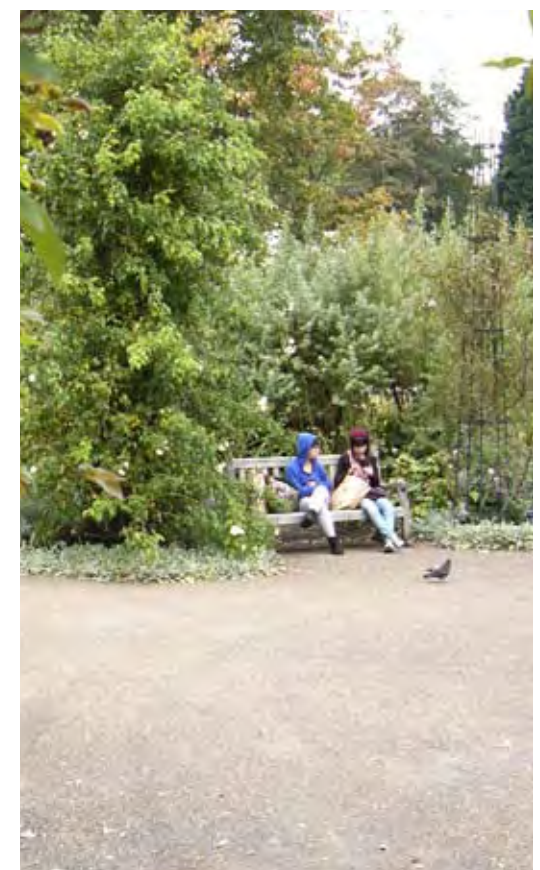
32 x 22m. high fence, 4m at head sides, to catch the ball and avoid to end up in the traffic. lower fence, 1.2m at long side allows people to hop over and to sit on the frame to watch the game. gives teenagers the possibility of making sports - in this case playing soccer - in the middle of the city, on a big traffic square. frequently/ well used by the teenagers of the neighbourhood. essential part of the life of kids: a valve for their power. good to combine with gardening, a gathering place and place to play, also for non-gardeners.

3, 4 sail/canvas _ terrace, waterside Porto. extendable. protects from sun and rain. defines the space and makes it more sheltered so that people feel invited to sit under(neath).

5 picnic bench _ Westerpark; Amsterdam. table and bench in one object/furniture. construction: wooden seat and tabletop, table-legs from steel. solid, and heavy, but movable. good place for rest, talk, lunch. because of fixed benches at the table, people are forced to group and face each other.



1 fenced soccer field, 2 roof canvas for shadow, 3 seating furniture



1 common space (out- or indoor) to meet, celebrate, make music, cook together

5 open lawn, 6 square with trees, 7 swing, 8 plaza + bench, 9 market



left block:

1, 2 big common greenhouse _ offers the possibility for cultural events, next to growing vulnerable plants.

3 celebration _ of 15 years allotment gardens Blijdorp, Rotterdam.

4 greenhouse _ used as café/restaurant Noorderlicht, NDSM terrain, Amsterdam North. functions as a magnet in the middle of the empty, industrial landscape. meeting point for artists or other young creative people. possible on one of the new garden locations, to connect its surrounding and attract non-gardeners.

right:

5 open lawn _ Südpark, Düsseldorf, DE. grass and trees as traditional elements of a park, gives space for people to lay down, play, picnic. with semicircular stairs that bridge a difference of height and create a tranquilized, shielded space. an open border that works as seating for observers while the lower open space is dedicated for actors.

6 tree square _ 20x20m part of the Mauerpark at Schweder-/Korsörstraße, Berlin. 4 x 3 rows, thus 12 trees of Quercus rubra on gravel, benches. solid and simple. good in the urban context. the trees spend shadow for visitors to take a rest and have a glorious autumn colour that contrasts with the light soil.

7 swing _ two vertical wooden poles, 2.2m high, supported by two transversal ones and connected with a horizontal bar. it has two hooks on its top to hang the swing. very simple and cheap construction, classical element on playgrounds. thinkable to integrate with other elements as a hedge, a rack to grow climbing plants or a roof construction.

8 sit corner, London _ paved square with cut out flower beds. the bench is placed a little bit backwards and surrounded by vegetation so that a cosy place is formed where one can observe passers-by without sitting in the passage way.

9 market stand _ improvised looking selling stand, basic setup: a table to present the products, a roof to protect from hot sun or rain and to define the selling area. to disassemble easily into transportable peaces to establish on a different location. the elements of a market stand are extremely convertible and can be used for several other purposes. very useful to have on a shared garden space.

1,2 steel chairs _ Prague Boulevard, Copenhagen. individual street furniture/ public outdoor furniture. movable, people can rearrange them according to their purpose they can put them together or move them apart. light enough to displace, too heavy to steal from site - one cannot carry them more than about 300m.

3 quadratic element _ DK, made of wooden boxes, with lightning inside. has seat, roof, back. all-round furniture. 2x2m, margin 50cm. can be used as wall/to define spaces but functions in the same time as window or serves as seating and meeting place. taken apart the boxes leave space for new interpretations – filled with special wool to keep water and earth inside, the boxes could serve e.g. as plant containers.

4 street bench _ made of metal, seat and back is created out of one piece of metal that is bent. solid but light and elegant. allows a view through it and does not cover what is behind. A more sophisticated version could serve as fence as well as bench.



5 Tools and help

helping instruments for gardening and mancraft

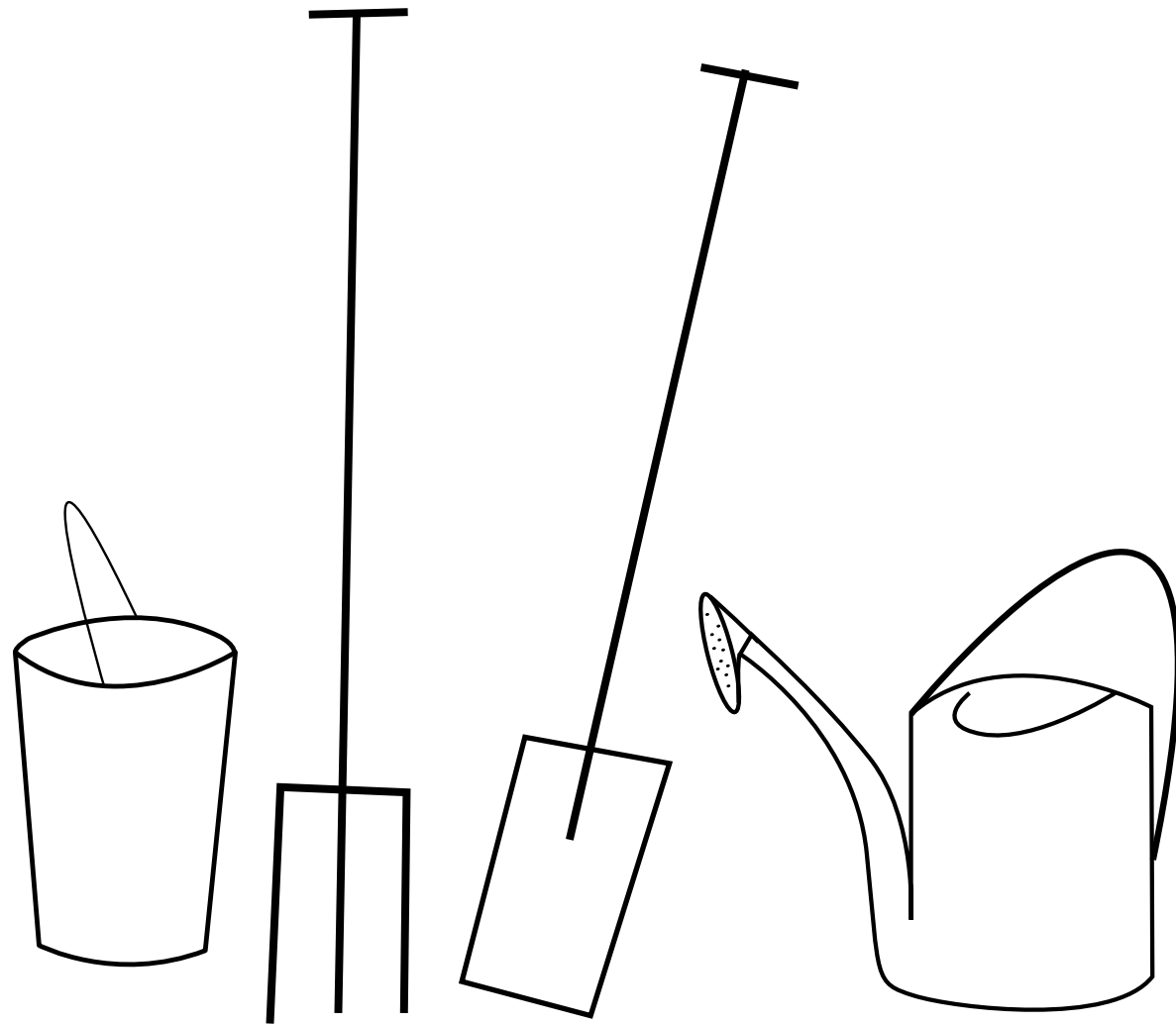
1 bean poles _ wooden poles up to 4m height, width variable, depends on amount of desired crops. elegant construction, crossed poles bound together with a cord and supported by a horizontal pole through the crossing. required for climbing beans that need a frame to grow. a typical attribute on allotments. the frame could be used in ambiguous ways, e.g. as border and growth help.

2 hot bed _ a reduced greenhouse, when no uprising buildings are allowed. construction of a wooden frame with glass panels on top, reaches knee height. one edge is lower (about 20cm high) than the other (about 45cm high) to provoke an angle of the glass. orientation of the lower front to the South, so that it can catch as most sunlight as possible. useful to grow plants already in winter until they reach a certain strength to be transplanted to the open field. useful tool, with regard to the volkstuin+ it could be merged with a bench – the back has the proper height – or could be used as a border.

3 net _ woven natural or synthetic material. often to find on allotments. used to protect crops from birds or insects that would eat up seeds or fruits. adapted with peas, berries, lattice and others. useful.

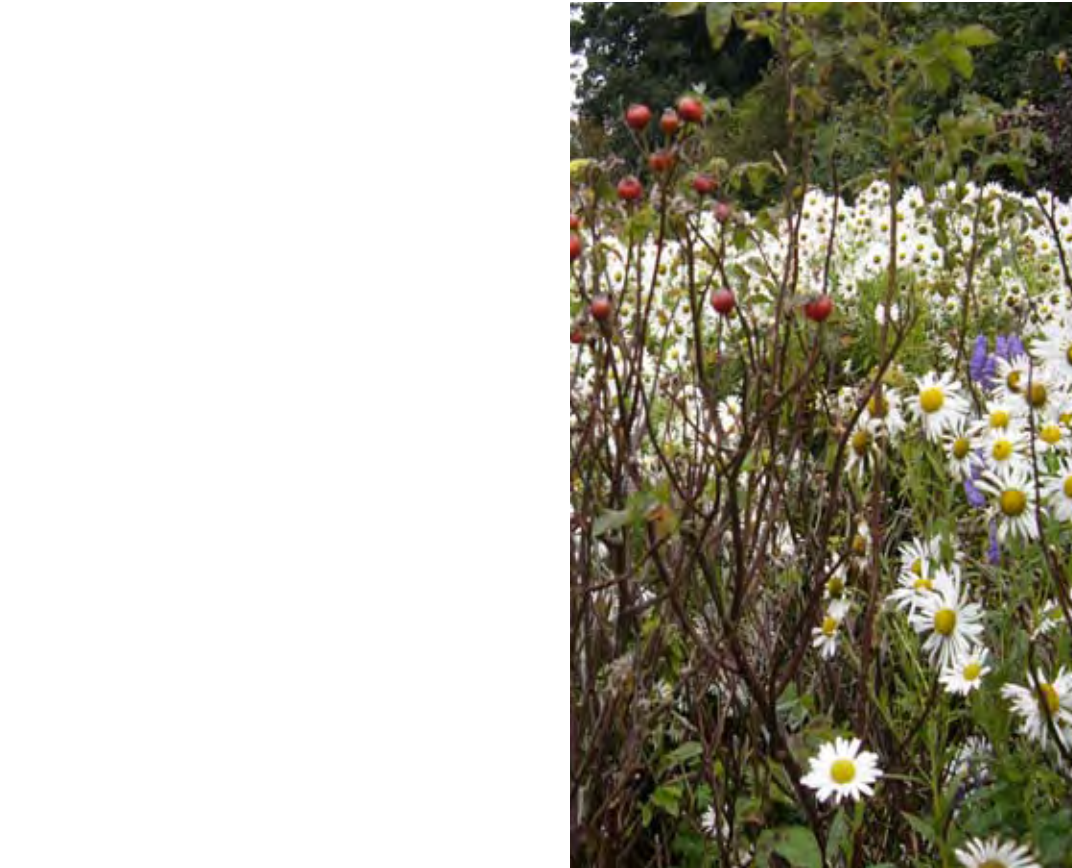
4 bucket, spade, pitchfork, watering can _ basic tools of a gardener. to adapt the soil, to dig, to root out, to plant and harvest, to water plants and to clear of weeds. useful to have these materials on site so that one does not have to bring it always. easy to share.

5 gardeners _ the helping hands, whether single or group, person(s) responsible for the plot. without gardener no garden. each garden needs maintenance – per definition it is a cultivated piece of land, under influence of man. neglecting causes overgrowing. the garden will be regained by nature. within a strong framework it would not so bad when that happens to one or two plots – it would even increase diversity and make the overall picture more interesting.



6 Planting and crops

the inside of the garden plot and planting of the general structure

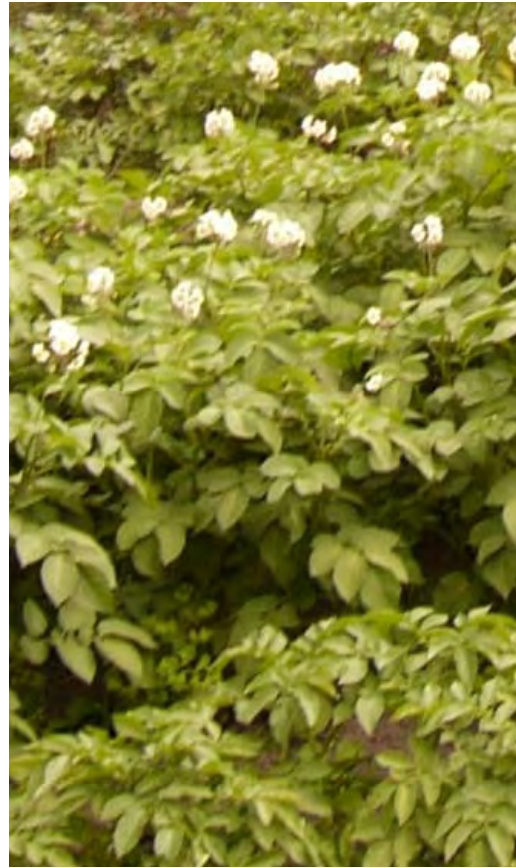
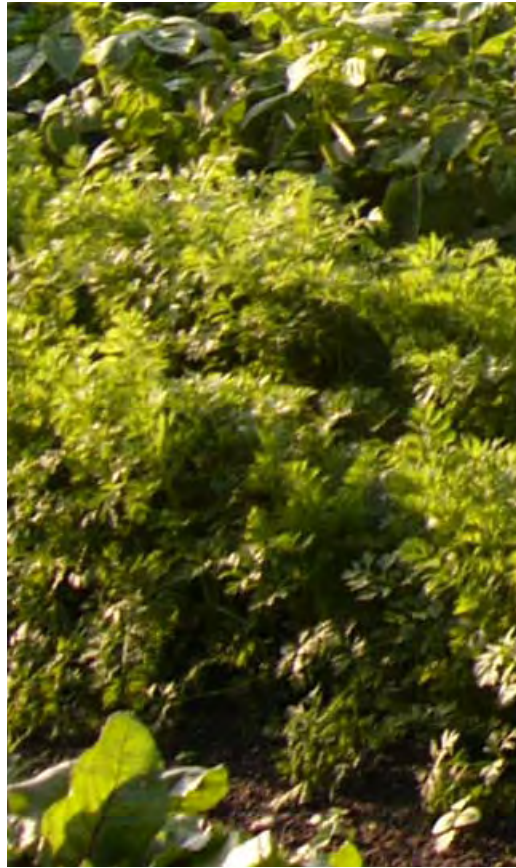


1 soil, 2 grass, 3 grass+wildflower mixture, 4 clover, 5 *Vinca minor*

ornamental 1 corn poppy *Papaver rhoeas* 2 sunflower, 3 hollyhock, 4 *Asteraceae*, 5 tulip



Curcubitaceae like 1 courgette, 2 cucumber,, 3 pumpkin 4 tomatoes and 5 beans



roots 1 carrots, 2 potatoes, 3 beets
leek 4 onion, 5 garlic, 6 lettuce



Herbs are the essentials of a kitchen garden. Already an important ingredient of the closter garden, they fulfill diverse functions. In the garden, herbs are not only pleasure to the eye, but mainly responds to the sense of smell.

In general a garden has to appeal and activate all the senses! It has to give pleasure to look at, one should be able to touch and feel different textures, one should smell the diversity of fresh digged soil, the green of the grass, the sweet flowers and the aromatic herbs. Next to their smell, herbs find use for cooking, as tea and have also medical use.



herbs: 1 Peppermint *Mentha x piperita*, 2 Parsley *Petroselinum crispum*, 3 Sage *Salvia officinalis*, 4 Rosemary *Rosmarinus officinalis*, 5 Thyme *Thymus*, 6 Lovage *Levisticum officinale*

Berries and fruit trees build up the upper layer of a vegetable garden.

Serving on the one hand edible products, they show on the other hand great blossom in spring and beautiful leaf colors in autumn.

Their fruits and berries can be harvested in different month of the year.

1 Blackberries, *Rubus fruticosus*, as shrub is almost impenetrable. Used at the borders of a garden it is a safe protection. But next to one can harvest its black, aromatic berries in the late summer (August) to eat fresh or to make marmelade.

More shrubs are: the raspberry *Rubus idaeus*, the black and red currant *Ribes nigrum and rubrum*, the gooseberry *Ribes uva-crispa*. A berry plant on the ground is the strawberry *Fragaria*.

2 Fruit trees delight the gardener in spring with rich flowering and later on in the summer or in autumn with their fruits. Whatever one can imagine: apples, pears, cherries and plums: a plus for every garden.



1 fruit trees: apple *Malus domestica*, bottom: sweet cherry *Prunus avium*



berries: brambles *Rubus fruticosus*

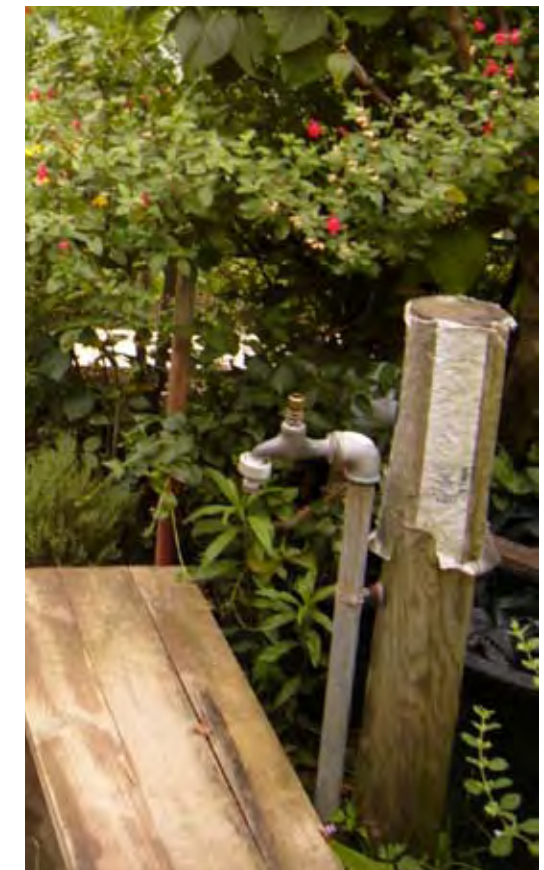
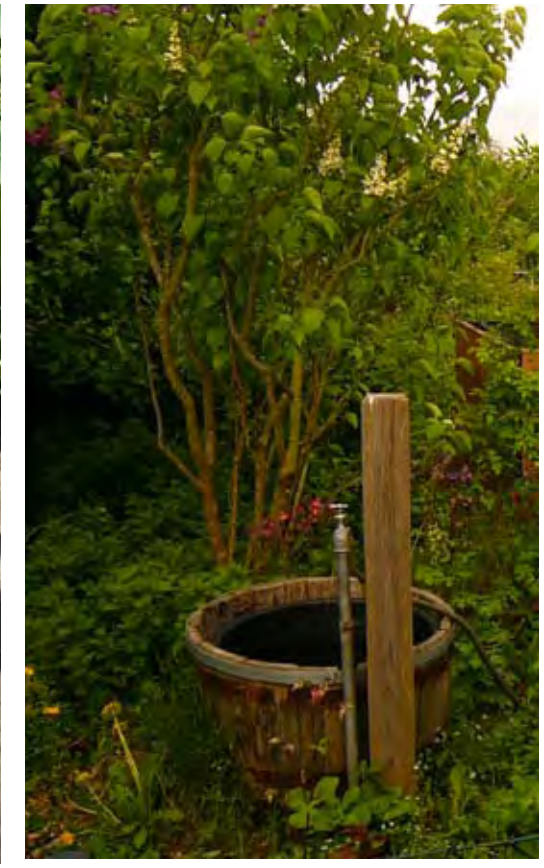


7 Irrigation and drainage

watering the plants, collect rainwater, remove surplus water

Without water no plants. When the natural watering by rain is insufficient during hot summers, the gardener needs to water his garden by hand. Most of the allotment gardens complexes have water access via the central watersystem, in form of a pump (picture 2-4). The pump, often very simple or unimposing, is a crucial meeting place on the garden complex, where everybody gets his water and where the gardeners make a talk. When there are buildings in the garden, it is smart to collect rainwater from the roofs. The blue water butt thus is a very common object in the allotment garden (picture 1).

Too much of water is not good. In the case of heavy rainfalls, the surplus has to be removed by drainage systems.

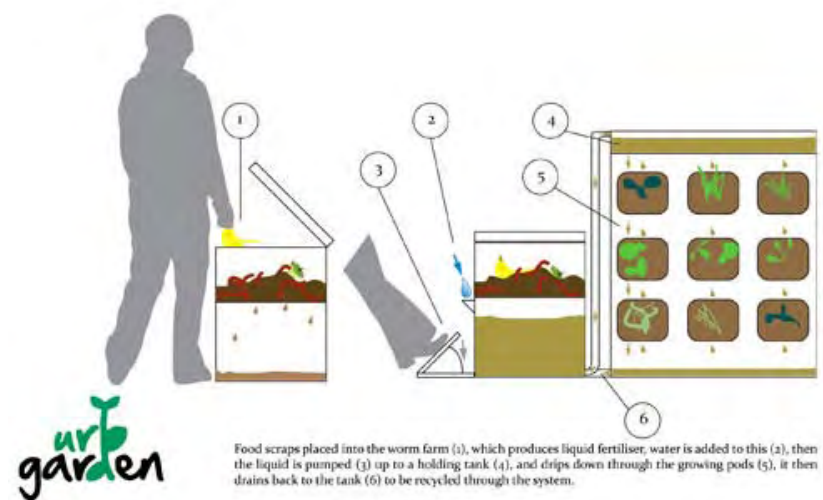


8 Compost and garbage

make use of organic refuse and make disappear waste

Composting important for closed cycles. making use of existing energie.

Kitchen refuse and other organic material is decomposed with time and can be reused to fertilise the ground. Keeping all organic material in the garden.



* Balconies

balconies as a solution, not attached to the ground.

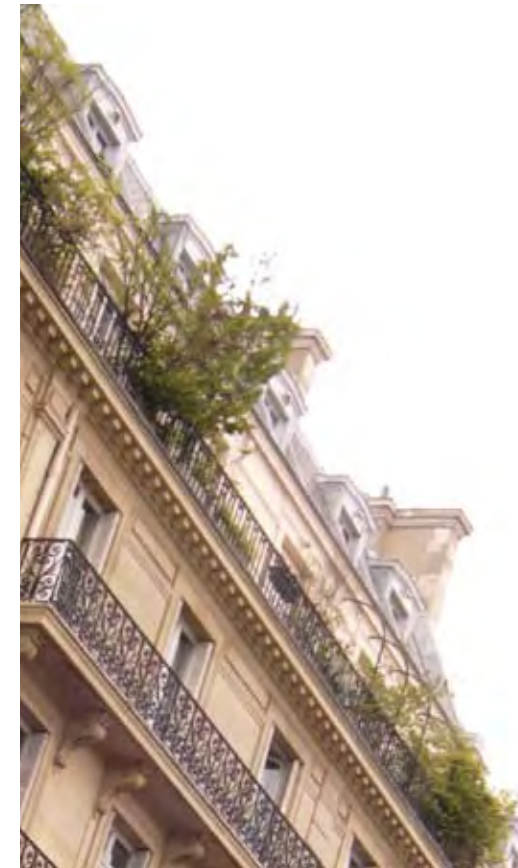
1 graceful iron balconies _ of typical urban houses, Paris. the architecture is classic and formal, inhabitants are well situated. the vegetation on the balconies is fresh, wild and formless, strongly contrasting but fitting the building. already a single plant on the façade draws attention but just the bulk/in large quantity/the mass of it evokes a fascinating natural image in the urban formality. see also pictures 3, 4.

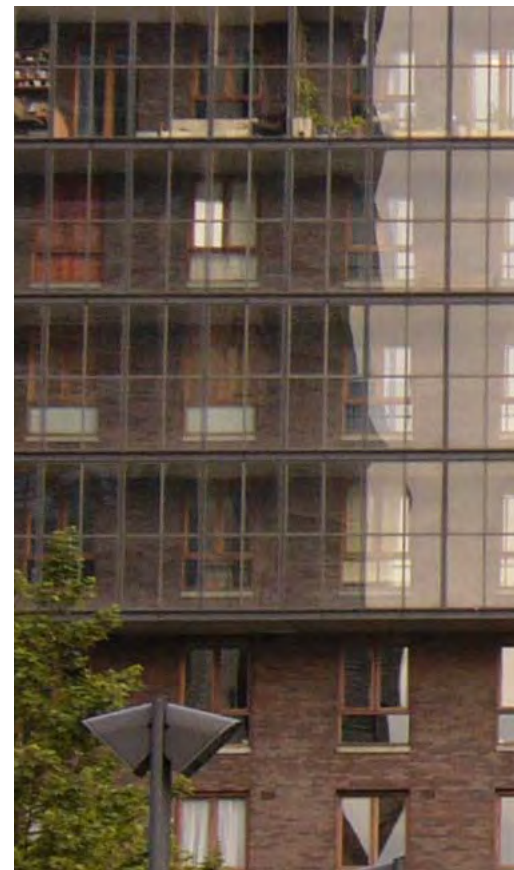
2 flower pots on balcony _ left warehouse at Piet Heinkade, Amsterdam. the balcony is nothing more than a wooden board, fixed at two iron chains at the wall. possible to pull up or let down. this is the only window that is open in the empty appearing building, where the flower pots betrays somebody living there. directly communicates a feeling of warmth: inviting, charming and comfortable/cosy.

3, 4 see 1.

5 planting basket _ made of geo-textile, jute and cotton. 60 x 60 x 40 cm, volume 100 liters, weight 2600 g. a very light alternative for the traditional, heavy planting pots, the strap makes it portable and allows its installation at the railings of the balcony or window. pervious to water/porous and breathable.

6 planting buckets _ Nieuwe Gracht, Utrecht. hard rubber, diameter +/- 60cm. movable gardens at their smallest scale. for everyone that has no ground available.





1 exceptional balcony _ in front of de Walvis, Amsterdam. driving landing stage, completely overgrown. does good in the new and clean environment of the Eastern islands of the city. accessible via informal stair at the side, for short or longer escapes into the wild green, with view on the water.

2 closed balconies _ arisen by a double wall. the balconies are at the same time galleries that serves the access of the apartments in this building in Amsterdam. in front of the façade a second wall of glass was add. that creates greenhouse climate, ideal for plants to grow. people set pots in front of their doors and by doing so liven up the house front and get a small garden.

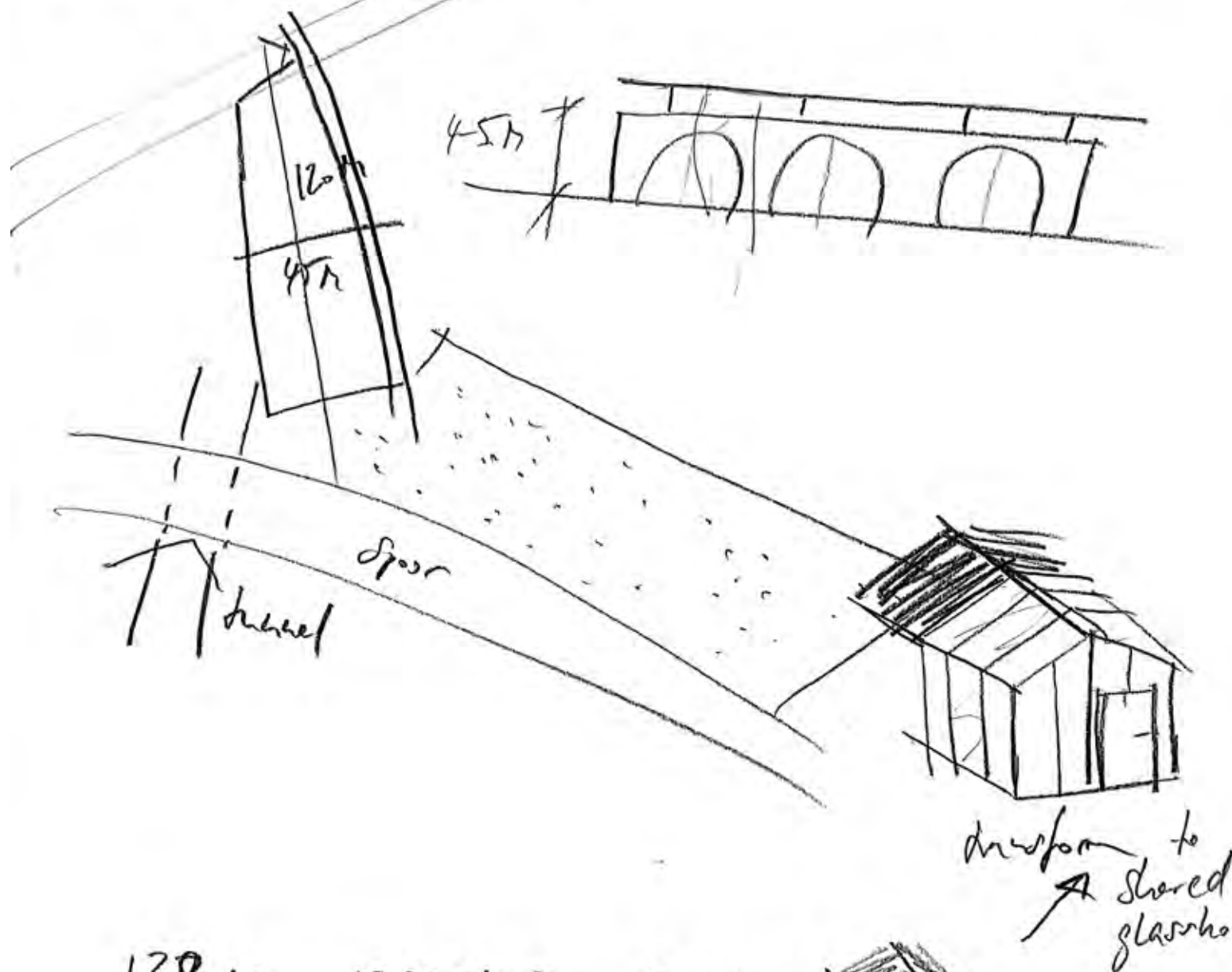
3 façade _ apartment block, Lisbon. because all balconies of this building are planted it looks like a vertical garden: alive. betters the climate in the house. pleasing appearance in the middle of the city of stone.



4 wooden construction _ ‘urban hamlet’ of Eduard Francois, housing, Rue des Vignoles, Paris. a wooden construction of balconies and stairways was added to the façade to grow plants on. refers to the horticultural past of the site. the – on the picture - naked looking framework is supposed to be grown all over. a vertical garden that creates a green living environment even in dense areas.

Human measures
as guideline for designing of the volkstuin+

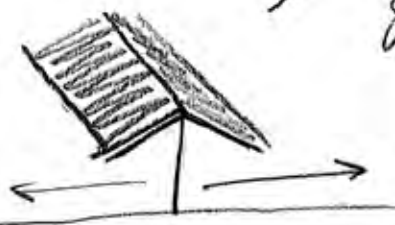
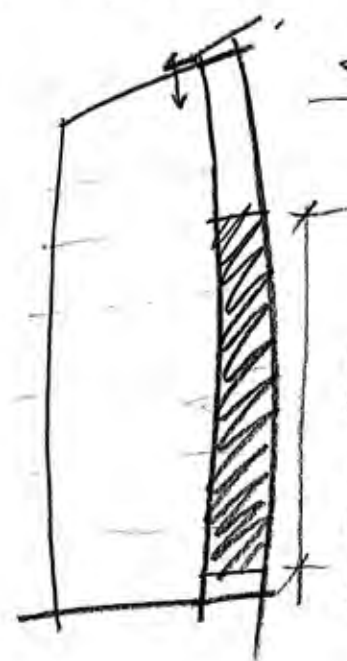
Station HOFPLEIN N



128 m 12,8 ch x ? = 12 ch / 0,938

1 ch = 10 m
1:1000

1 ch



80 m x 10 m
common tool storage,
meeting place,
kitchen

COMPONENTS VOLKSTELING

denk ook aan
kast en klaar elema
de te gebruiken zijn!

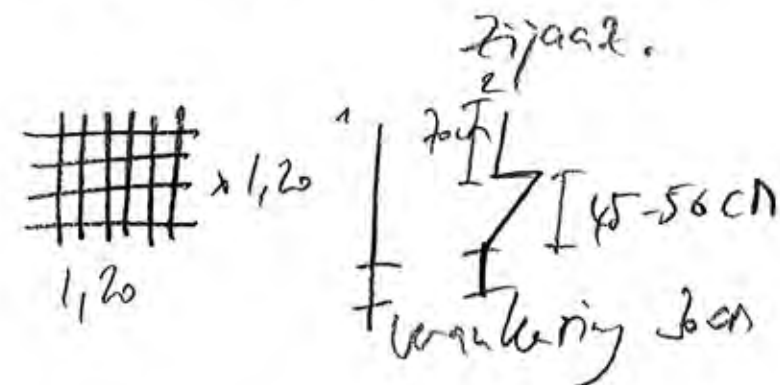
1 ENCLOSURE/EXCLUSION

hekwerk, haagdeuren (3 soorten?)
1 Luchtgroene



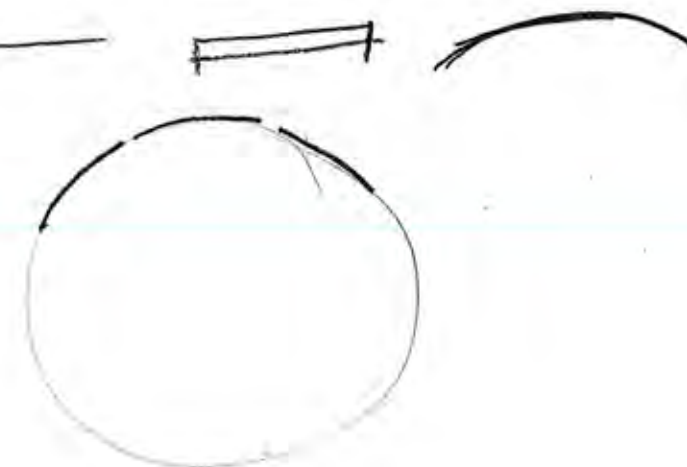
rek het goede
plant afstand voor
heggen

haggen/1m 3-5



127,5 x ?
→ 60/127,5

buur



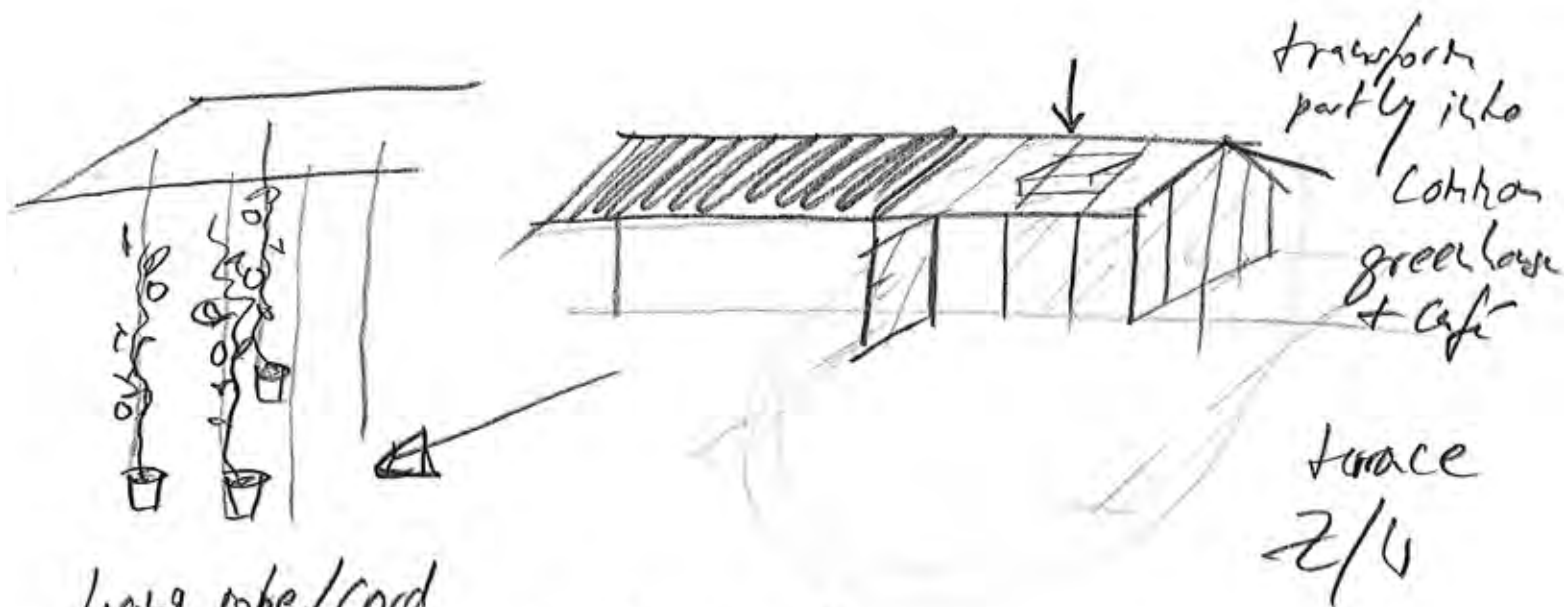
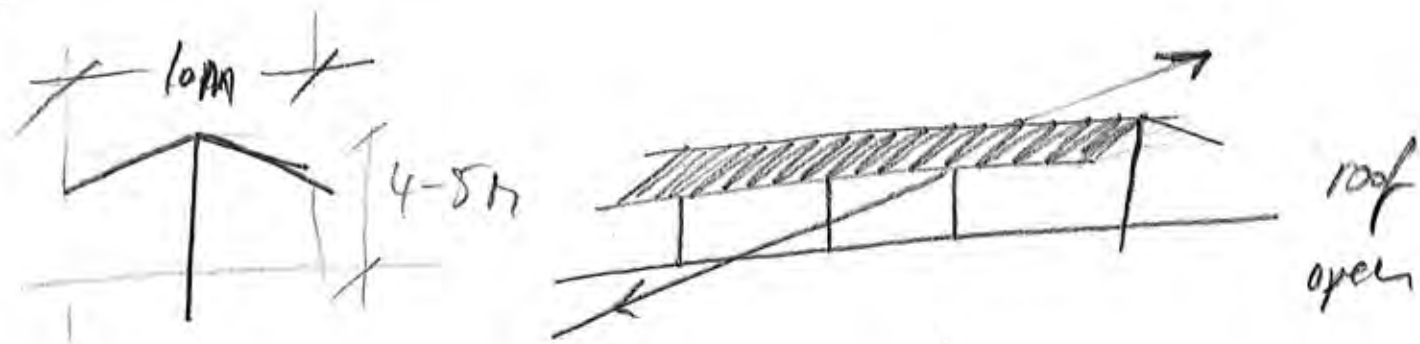
132,5%
1325
127,52 x X = 169

A fence that is a bench at the same time

A wooden box, that is planting bucket but also works as a seat, when turned upside down, and as a hot bed.

bean poles that can serve other things like building a door or holding a swing.

Sketches, ideas for design,
multifunctional components



hang rope/cord to grow plants like tomatoes, beans



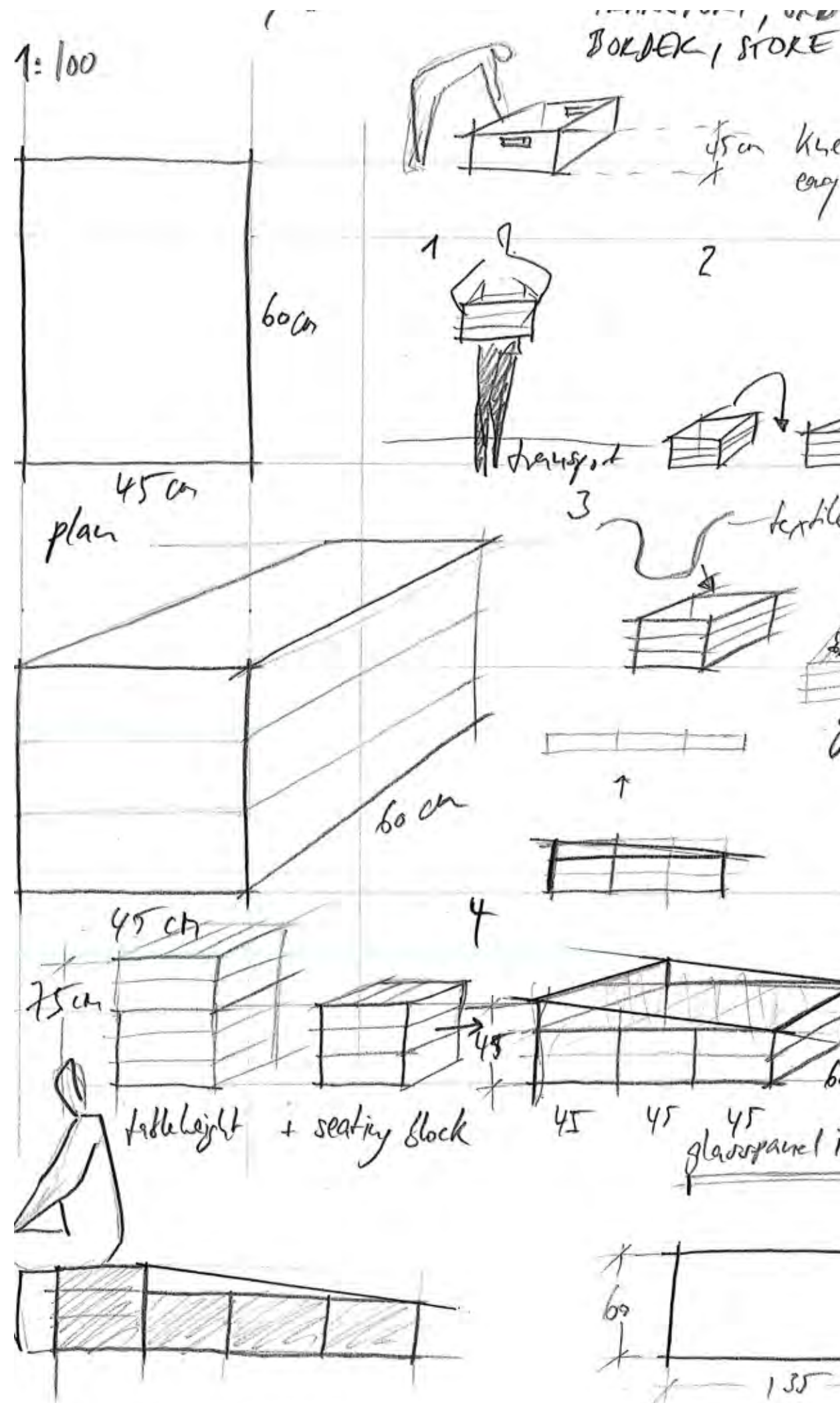
concrete ledge and space to sit



metal fencing/iron fixed in concrete



strong border protects against wind and falling over the edge



The interaction of different types of components is crucial. It could be an aim for the new garden components to not just fit in one group.

design Multifunctional borders/ a new way of defining borders can be a challenge in public space!

tools + help



irrigation + drainage

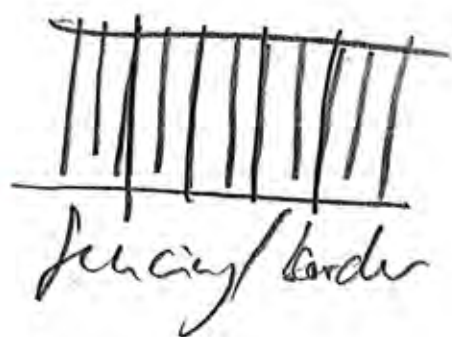
45x45x60

balconies / roofs

as a second layer
of gardens above the street



in box



stepped
rover

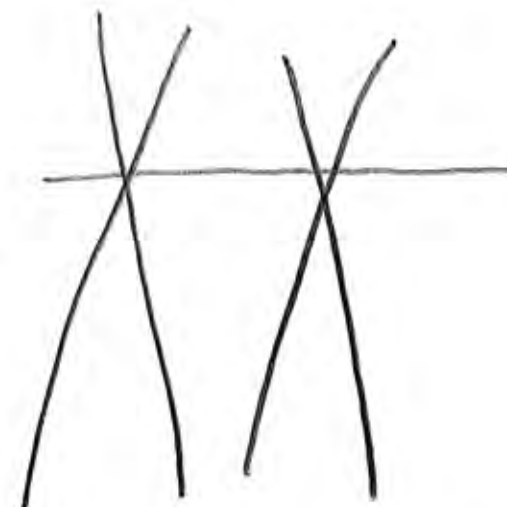
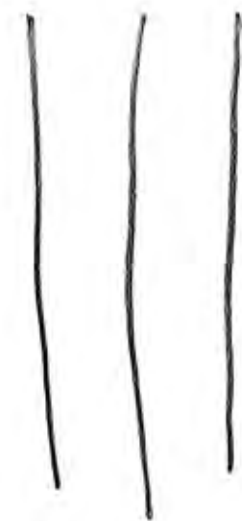


store
plant
move

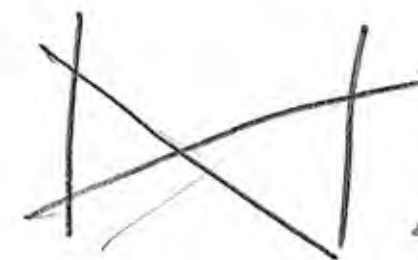
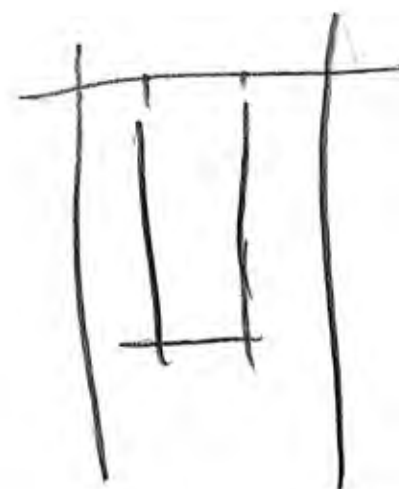


look feel

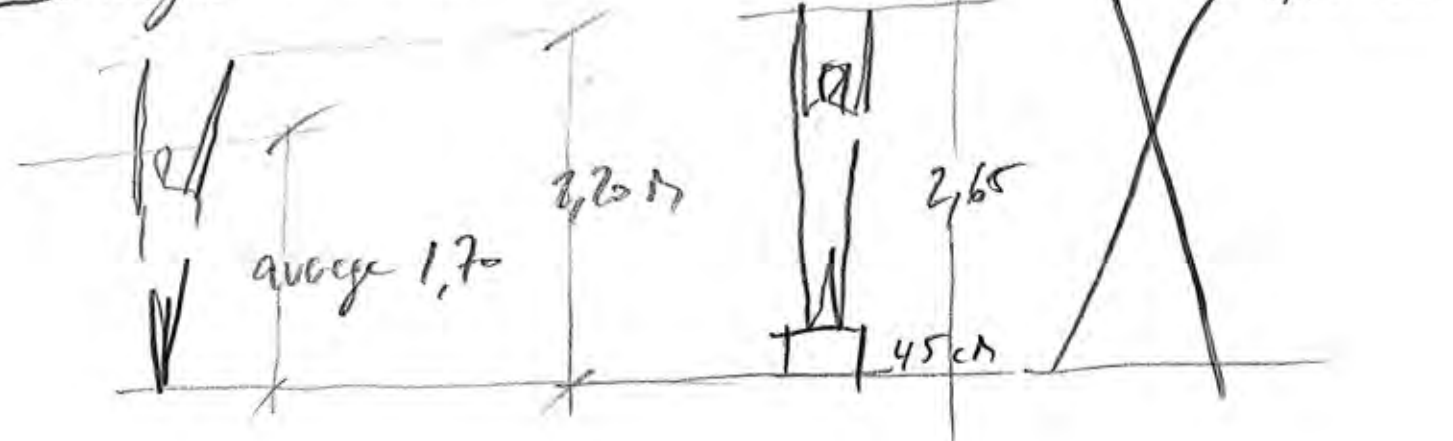
poles



to grow climbing plants
e.g. beans

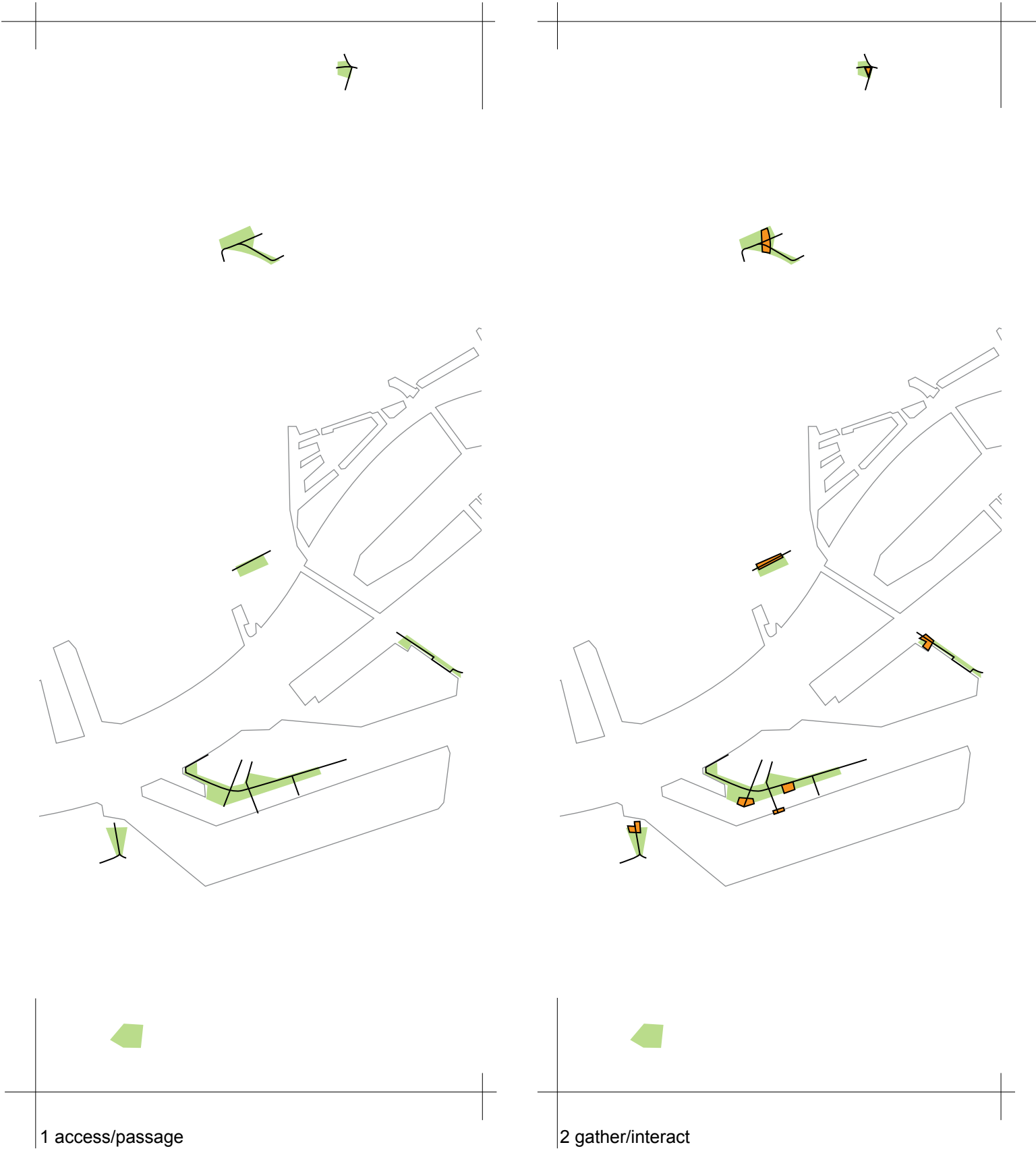


max height to reach at





Section through the city of Rotterdam with possible locations for new gardens: volkstuienen+





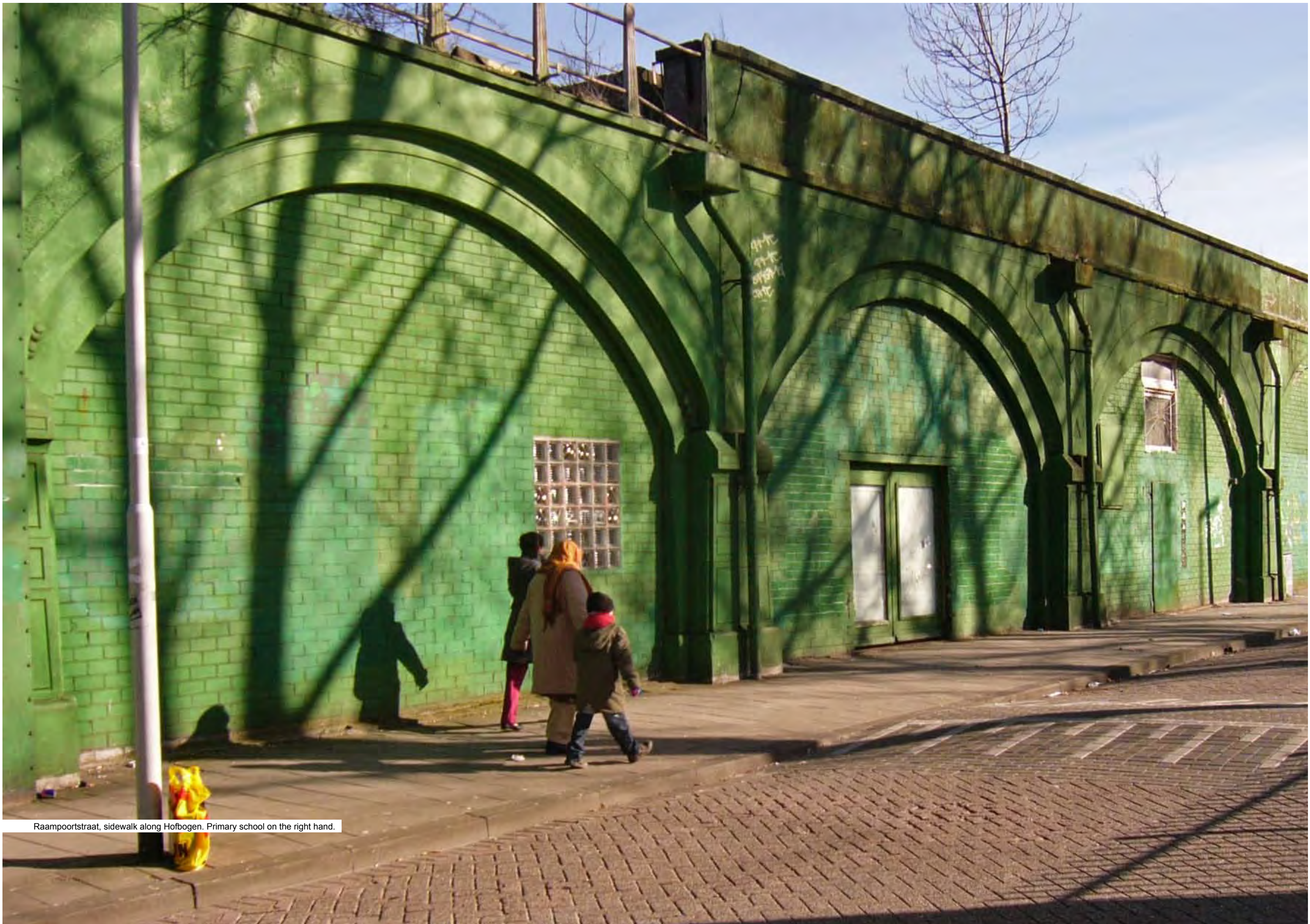
the concept is applicable on different locations and transferable to other cities. Here, one location is chosen and worked out as an example: Hofbogen and surroundings.

INTRODUCTION OF THE LOCATION HOFBOGEN AND SURROUNDINGS



Corner Heer Bokelweg/Raampootstraat. Western part of the location: primary school, schoolyard, grass patch, rails, in the background the Hofbogen.





Raampootstraat, sidewalk along Hofbogen. Primary school on the right hand.



on the top of the flat roof of the Hofbogen, the old floor of the former Hofplein station: special view on the city. Still remaining, the frame of an former bowling alley.



Stroveer, the Eastern part of the design location. Apartment blocks with car parking on street level, anonymous grass patch, right bordering by train rails

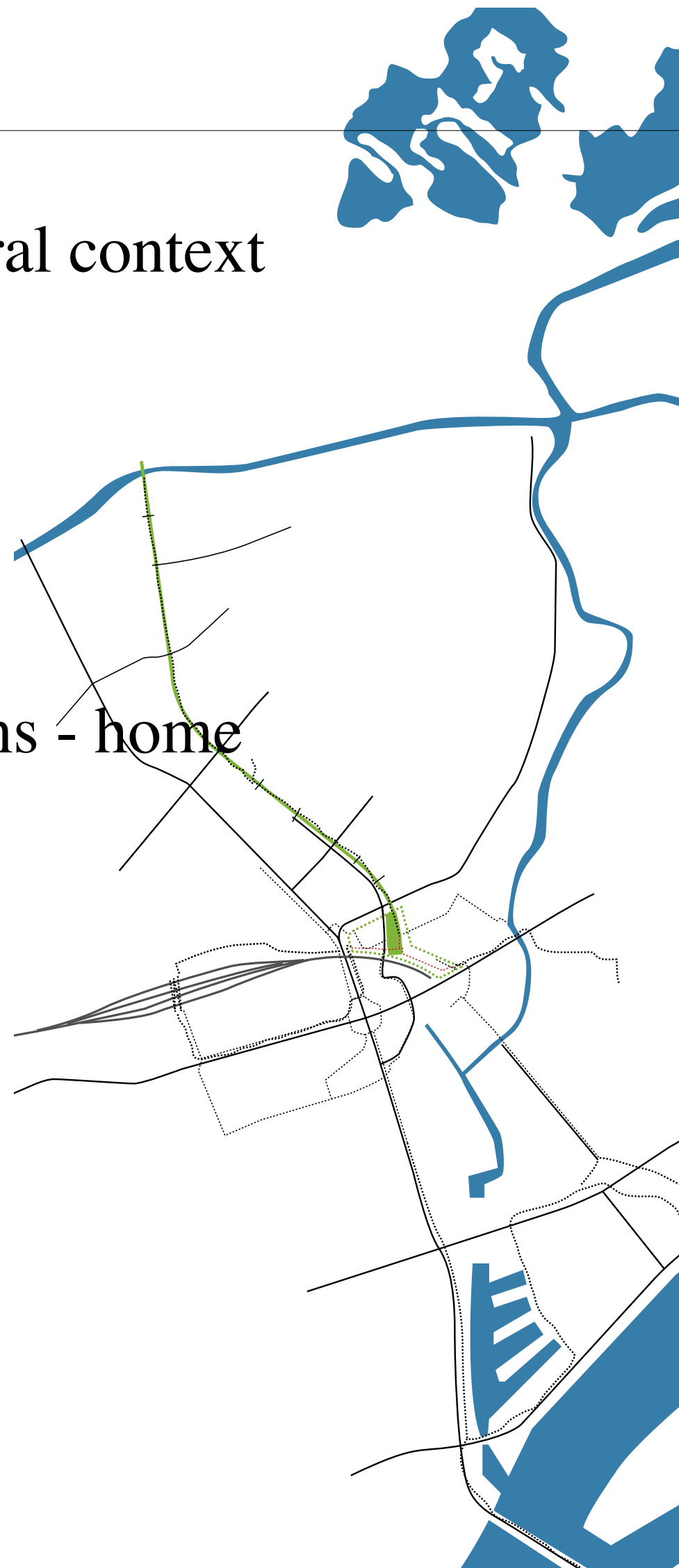


Hofbogen structural context

shadow analyses

walking routes

gardeners - gardens - home

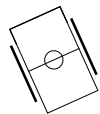


Design

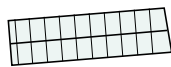




LEGEND



public soccer cage bordered by metal wire



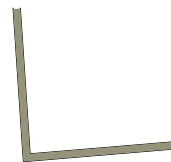
glasshouse on the roof: gathering point
tea-house and greenhouse



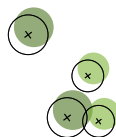
stairs, metal



furniture, benches, chairs, tables



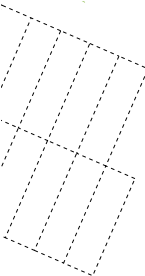
wooden frame of the common roof garden on sit height



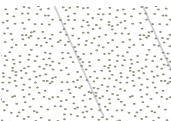
fruit trees, mixed Dutch old cultiva's,
apple: *Malus domestica* 'Boskop' (winterapple) and *Malus domestica* 'Alkmene'
(summer)
cherry: *Prunus cerasus* 'Schattenmorelle' (sour cherry, morel) and
Prunus avium (sweet cherry)
plum: *Prunus domestica* 'Hauszwetsche'



grass sowed with herbs and wild flowers
Salvia officinalis (sage), *Mentha x piperita* (peppermint),
Origanum vulgare (wild majoram)



garden grid, 10 x 3m
gardens can be allotted in different sizes: 30 -120m2 or more,
according to peoples wishes.



grit on the streets, subtile indication of the roadway



hedges: *Carpinus betulus*, *Crataegus* and *Acer campestre*, mixed
main pathes: gravier d'or (gravel),
side pathes: grass mowed



the former rails reused as pathway, filled up with grit, track still reconizable



individual used gardens

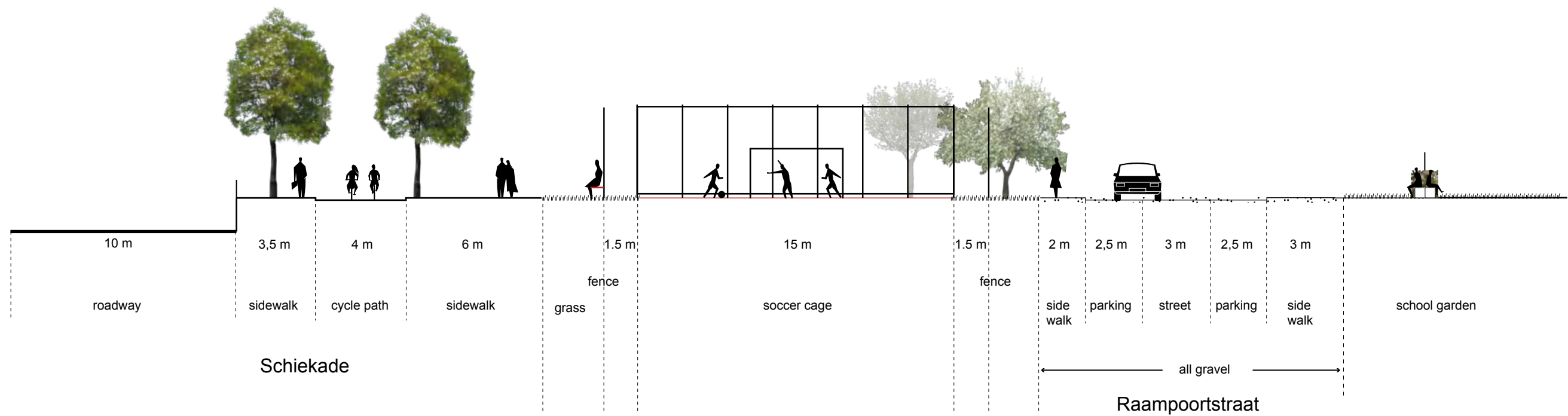
This plan should not be read as a static plan. It shows an optimal situation.

All components of the concept are implemented here: 1 access/passage,
2 meet/interact, 3 subdivision, 4 enclosure/exclusion.

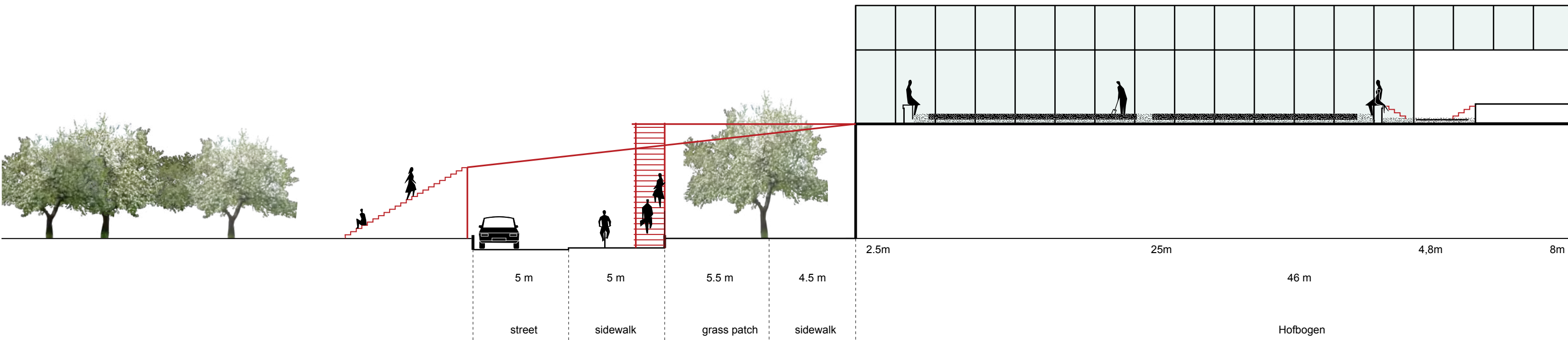
These components can be regarded as implementation stages. A simple path structure accesses the area from the North via the former rail tracks, and connects East and West. Next to the bridging via red metal stairs, there is a connection through the Hofbogen building on streetlevel. Shared spaces stimulate the interaction of gardeners and non-gardeners and links this area to its urban environment. There are the soccer cage in the Western part, the green- and teahouse on the roof and the three enclosed spots on the Eastern garden terrain, that are linked to the path system. Here people can meet up, take a rest in those romantic, wild oases, on grass sowed with wild flowers and herbs, that appeal all senses. These places are equipped with solid red metallic furniture or benches, tables and moveable chairs. All the gardens have an underlying grid of 3x10m. People can choose for several sizes of gardens from 30-120m2, related to a connected price-system. What happens within the gridstructure: the individual fill in of the gardens is left for its user. Some garden plots might remain empty which would make appear wild meadowshere and there. The top layer of fruit trees has a connecting effect on the three parts and makes the area recognizable, it gets a country-like atmosphere that people are not used to in cities anymore and contrasts with the urban environment on this place.

On the top of the former Hofplein station there is a space for a common garden within the frame of an old bowling alley. The frame is coated by wood, so that it is surrounded by a frame to sit on.

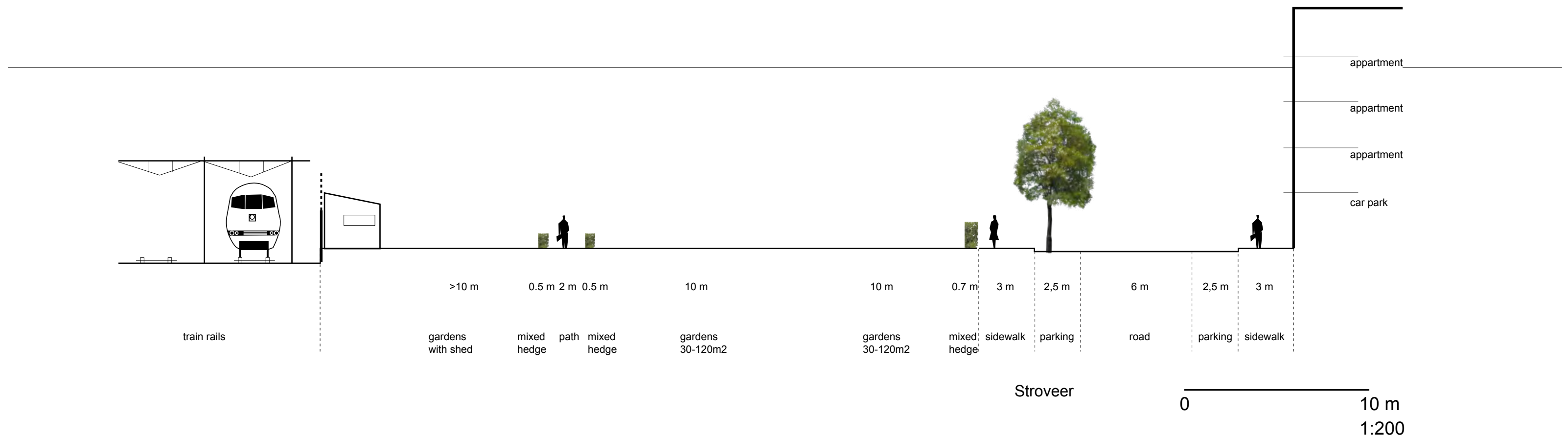
CROSS SECTIONS



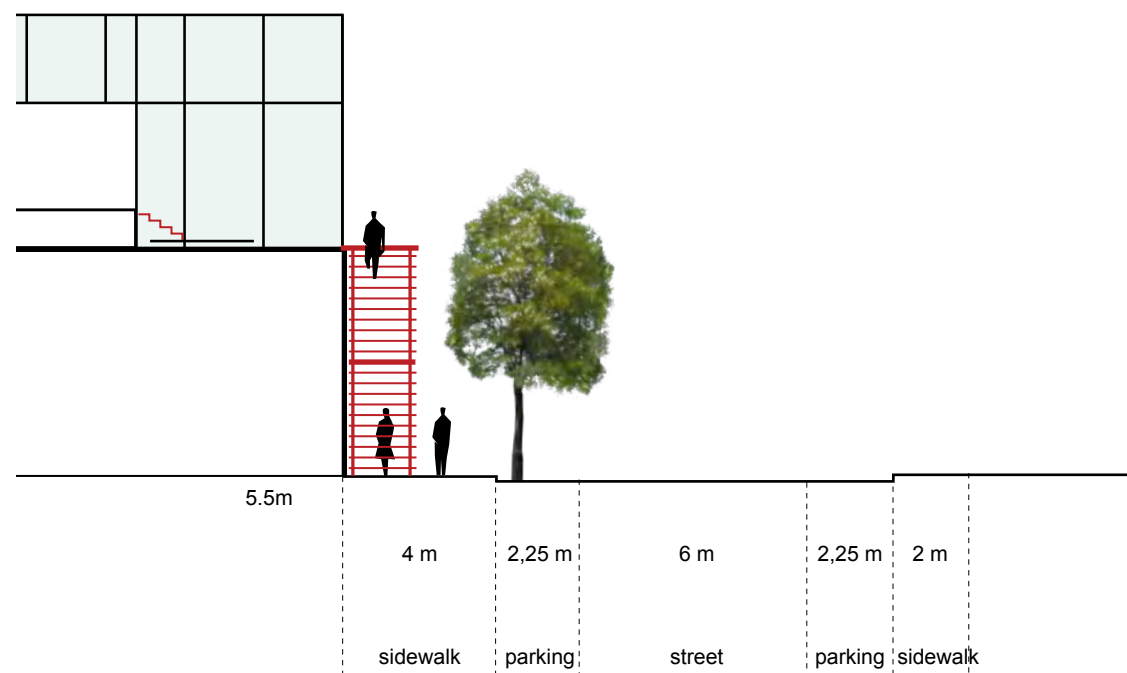
1 cross-section Western terrain: from Schiekade to Raampootstraat and school yard.



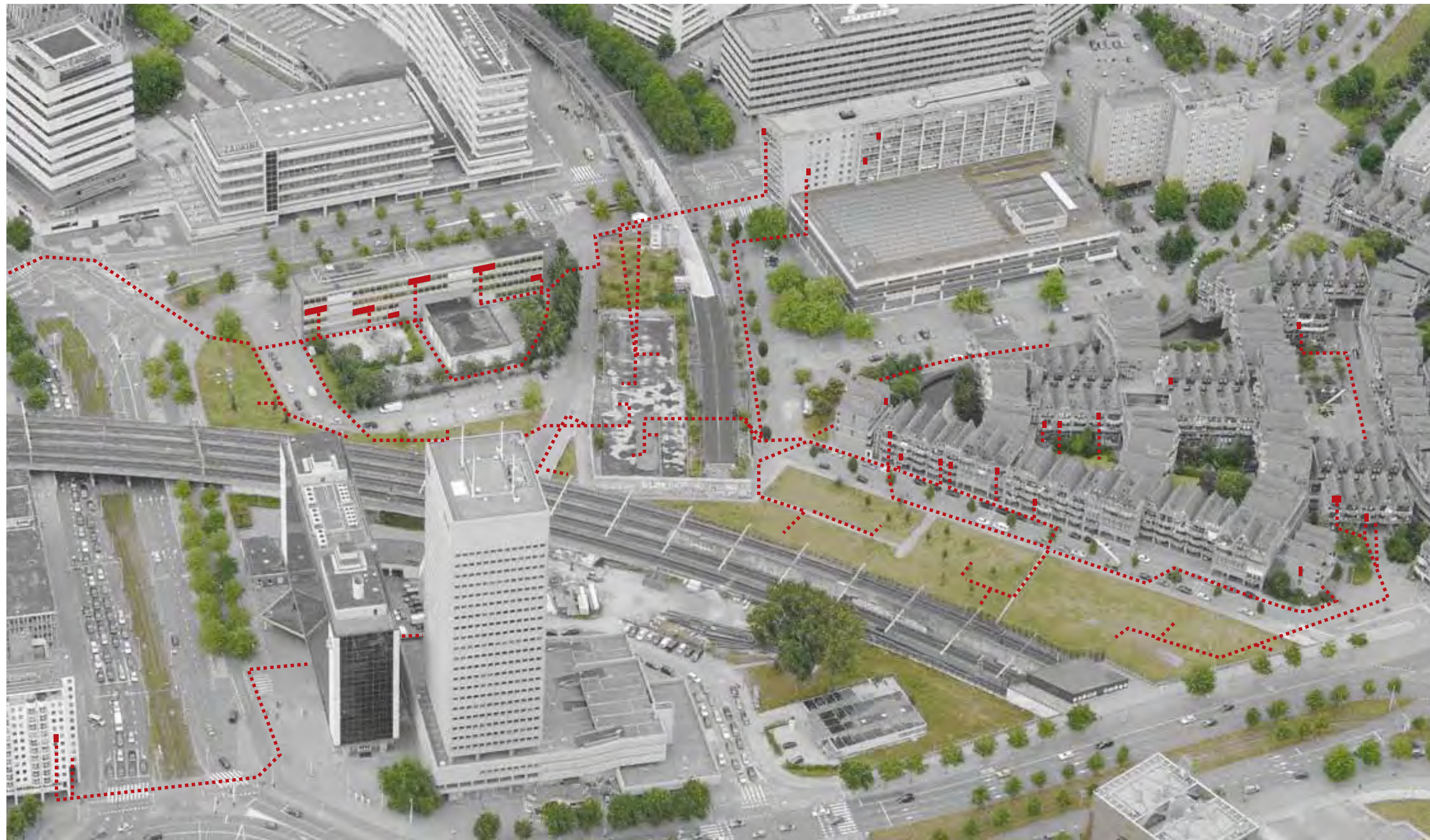
3 cross-section Eastern terrain: roof Hofbogen. Acces via metal stairs, painted red. The tea-/greenhooose on the full width of the roof with the community garden in front. Former rail track functions as path, too. Acces as well from West via the fruit yard, as from South, Raampootstraat. Next to this bridging, one finds a passage on street level through the building.



2 cross-section Eastern terrain: inbetween train rails and apartments. Three garden plots in a row, 10m depth. In the gardens left, sheds are allowed. In the other two rows not. Access of the gardens via doors from the inner pathway, lined on both sides of a hedge of 0,8m heigh.



user patterns of neighbouring gardeners



care, responsibility, grounding, love, maintenance, activity, work, time, individuality
(actively enjoying the gardens)

supervision, observation, delight of watching, stage effect of the gardeners, vibrant watchbox (passively enjoying the gardens)

general structure: accessibility, passage, performance, movement, connection

general structure: subdivision of the space, allotting spaces to citizens



IMPRESSIONS

The roof of the Hofbogen with a common garden within the frame of the former bowling alley. Next to that, there is a common green house that serves as a tea house with fresh marroccan mint tea, grown on location. Attached to the green house there is a wooden terrace.







Impression Eastern part 1: view from Stroveer direction Souh to the train rails. In the background the tower of the city hall on the Coolsingel. Recognizable, solid, clear structuring hedge frame, with meeting spaces and fruit trees.

apple, *Malus domestica* 'Boskop' and *Malus domestica* 'Alkmene',
cherry: *Prunus cerasus* 'Schattenmorelle' (sour cherry, morel) and *Prunus*
avium (sweet cherry), plum: *Prunus domestica* 'Hauszwetsche'



There are countless images and ideas of urban community gardens – as there are gardeners.
Indeed this is the essence and strengths.'

(von Hassell, M., 2002. Acknowledgements)

‘Urban community gardens epitomize the possibility of urban spaces in which individuality in all its myriad forms can exist in the context of a community without being subsumed by it.’

(von Hassell, M., 2002. Acknowledgements)

Impression Eastern part 2: on pathway through the gardens. Foreground: common meeting space.



grass, sowed with wild flowers
and herbs

gravel: gravier d'or
(halfverharding)

Carpinus betulus, Crataegus and
Acer campestre, mixed





Area in front of the primary school 'Het Spoor'. Public soccer cage and fruit yard.