

Internationaler
Städtebau +
Entwerfen

Unloved Heritage Socialist City?

Workshop 10. - 23. September 2017
Odessa

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01.



02.

01 Photo of Novoselov Street, Cheryomushki,
by A. Pidberezskii 1973

02 Photo of Novoselov Street, Cheryomushki,
by A. Pidberezskii 1973

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04.

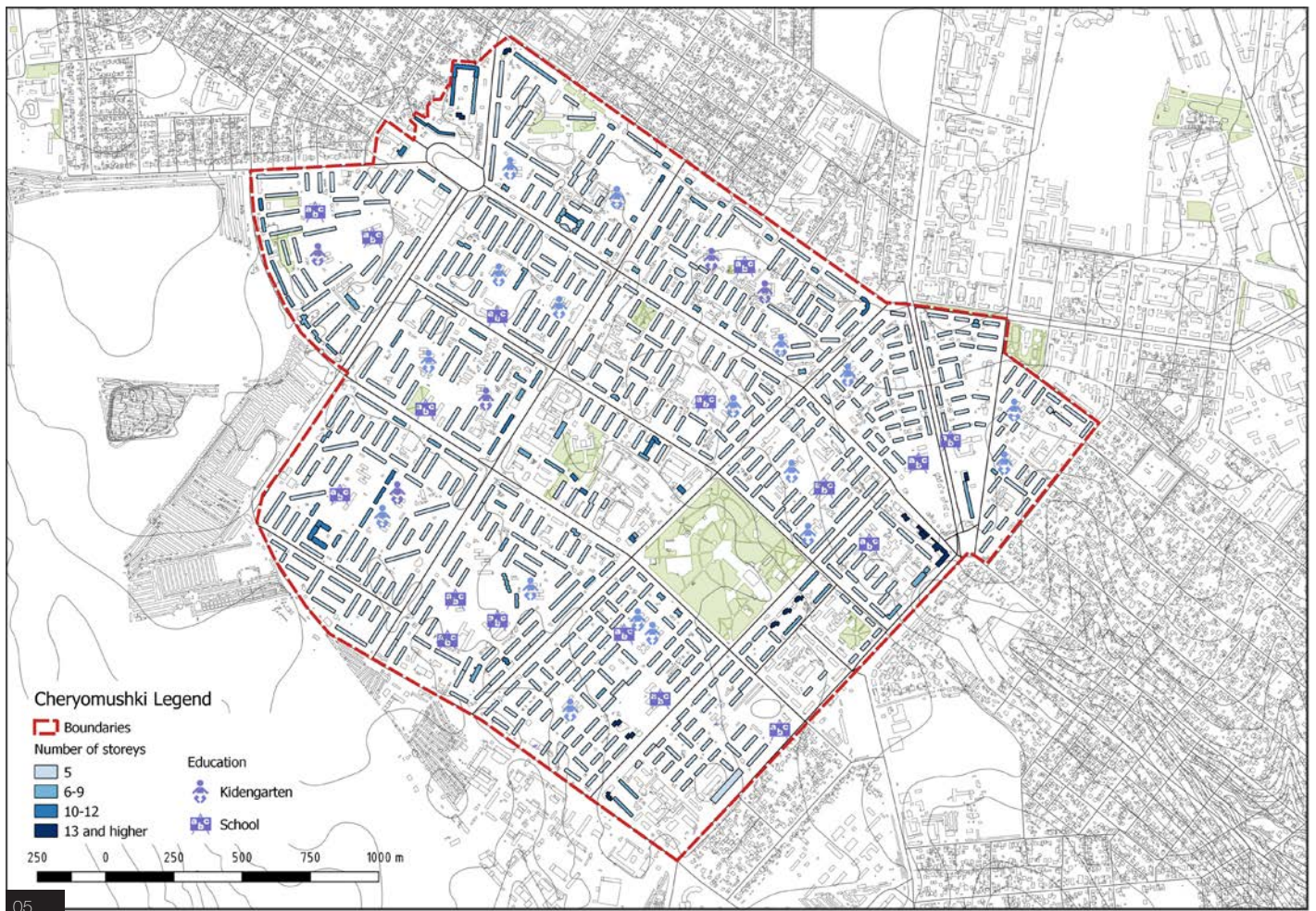
03 Photo of a fragment of Cheryomushki

04 Aerial photo of Cheryomushki, Urban Cadastre
Office of the Department for Architecture and Urban
Development in Odessa

A word of salutation

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05.

The task was to on different scales from a citywide perspective to details in the blocks.

Analysis – potentials and problems

In the first days there should have been the focus on a case sensitive analysis, understanding the deficits and potential of the district already discussing first measures on how to improve the found aspects. For every topic it was crucial to have a closer look to the context – in a historical, functional, spatial, social manner.

It was essential to work out and show where the potentials and deficits within the district and/or in relation to the city, to the block were found. It was also required to show clear goals concerning each topic in potential and deficit maps.

Each group was asked to make a suggestion on how to deal with its findings. The point of the working process was to focus but not to limit oneself on ideas and approaches.

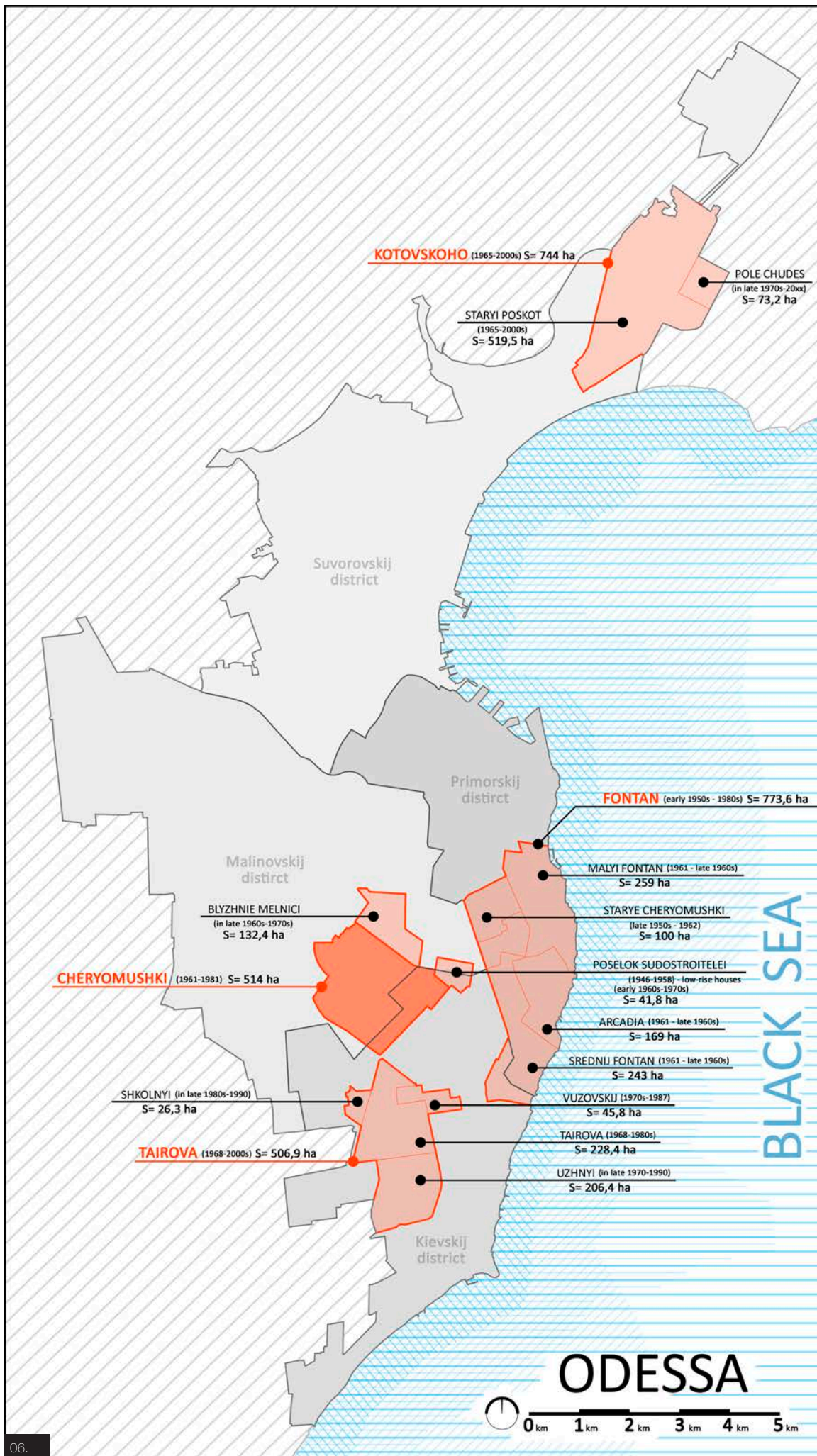
Conception

We had to work out a concept specifically for the given site. So it was required to state the crucial conceptual ideas for improving the area and, besides the urban layout, to discuss possibilities of implementation and develop a strategy. And in conclusion, enunciate requirements which are needed in order to achieve one's proposal?

Strategies for implementation

Proposals for urban design solutions, reorganizing of open spaces and transformation of buildings can only be successful if there is a clear strategy of the whole planning and financing process. Therefore, it was crucial to develop strategies and policies, in order to integrate single measurements in a broader picture. Phases had to be thought over, how to start, what was the long-term-strategy and short-term measurement? Important point was that the investors need a secure environment in which they can calculate their risks and benefits. At the same time, it was very

important to think about the regulations to ensure high quality, so the funding models had to be discussed whether the burden should be taken from the individuals and distributed among the community. Finally, the individuals had to be involved in the decision-making process to guarantee social and sustainable developments.



Prof. Mark Meerovich
Asst Prof. Olga Savytska
Anastasiia Ivanchenko
Iuliia Frantseva
Kirill Kumpan
Sofia Bakanova
Svitlana Protsenko

Functions, Density and Diversity

1. Situation and background. Analysis.

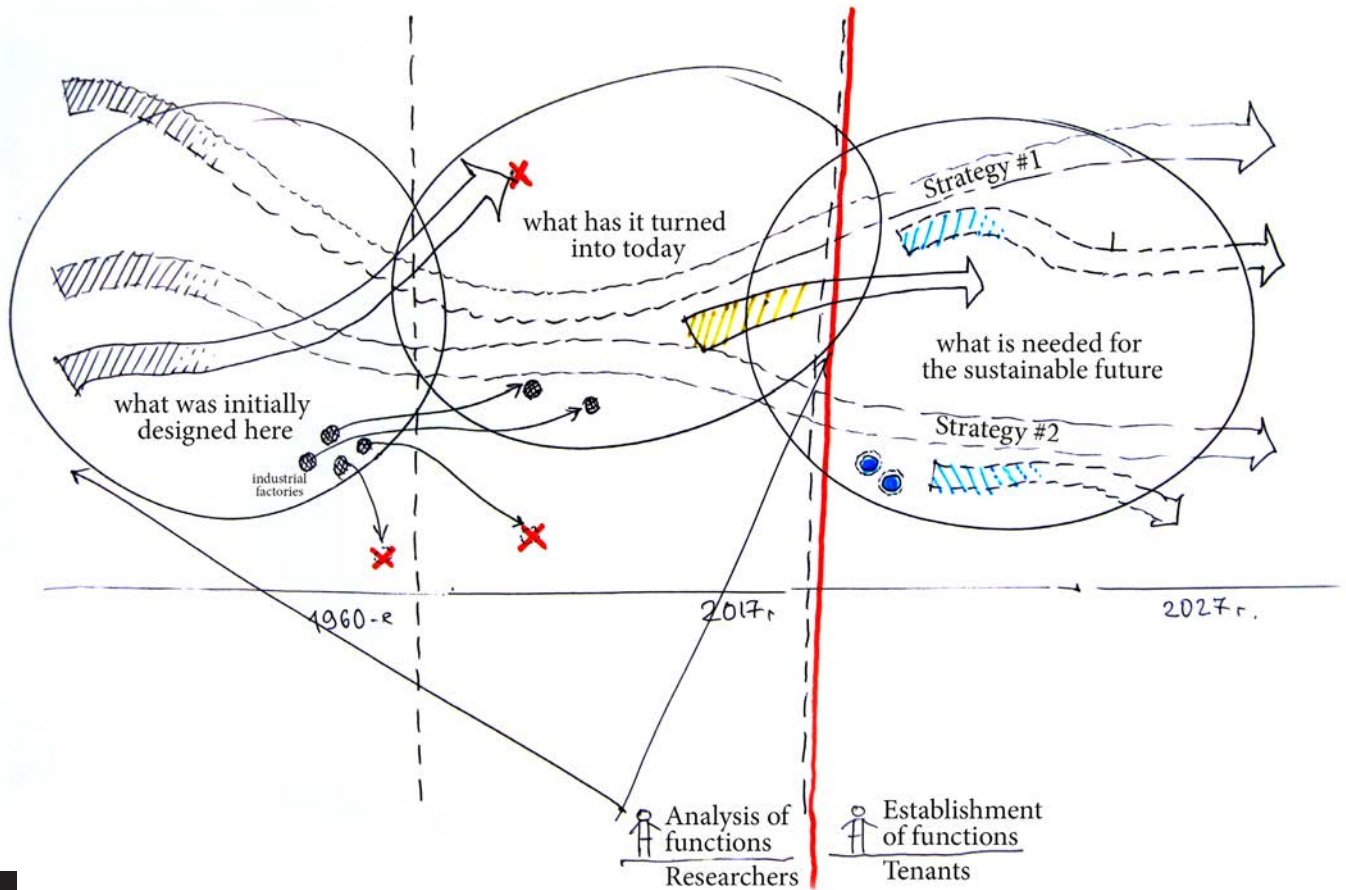
For analysis of functional meaning of the Cheryomushki district our group used method of the comparative analysis. Comparing the initial functions, which were implemented in project of 1960es with existing situation, we can see both the development and decline of base functions of the district. In the beginning the district was designed for life and leisure of workers of big industrial factories. Nowadays function of big industrial companies changed drastically. “Promsvyas” factory does not work now and gives for rent their rooms for offices. Science-industrial institute “Shtorm” almost stopped its activity. Part of the territory is a sport club now. Though project and research institutes nowadays occupy only insignificant area of once large factories, they rent all the remaining facilities and indoor space.

Functions of the daily services changed their location. Former multi-functional centers of daily services, which included hairdressing, dry-cleaners, shoe repair shops and clothes repair shops divided into small distributions spread all over the district. When previously such centers were situated on the perimeter of the quarter in quantity of 2-3 units, nowadays they have lost their precise positioning. Former large department store transformed into supermarkets and small retail shops, which are chaotically scattered throughout the whole territory of the district.

Educational function changed only a little. Some kindergartens were closed or became a private property, other are still working.

06 Scheme of the existing districts in Odessa including Cheryomushki, Kirill Kumpan, 2017

The transformation of functions (1960-2017)
and perspectives of functional development in Cheryomushki (till 2027)

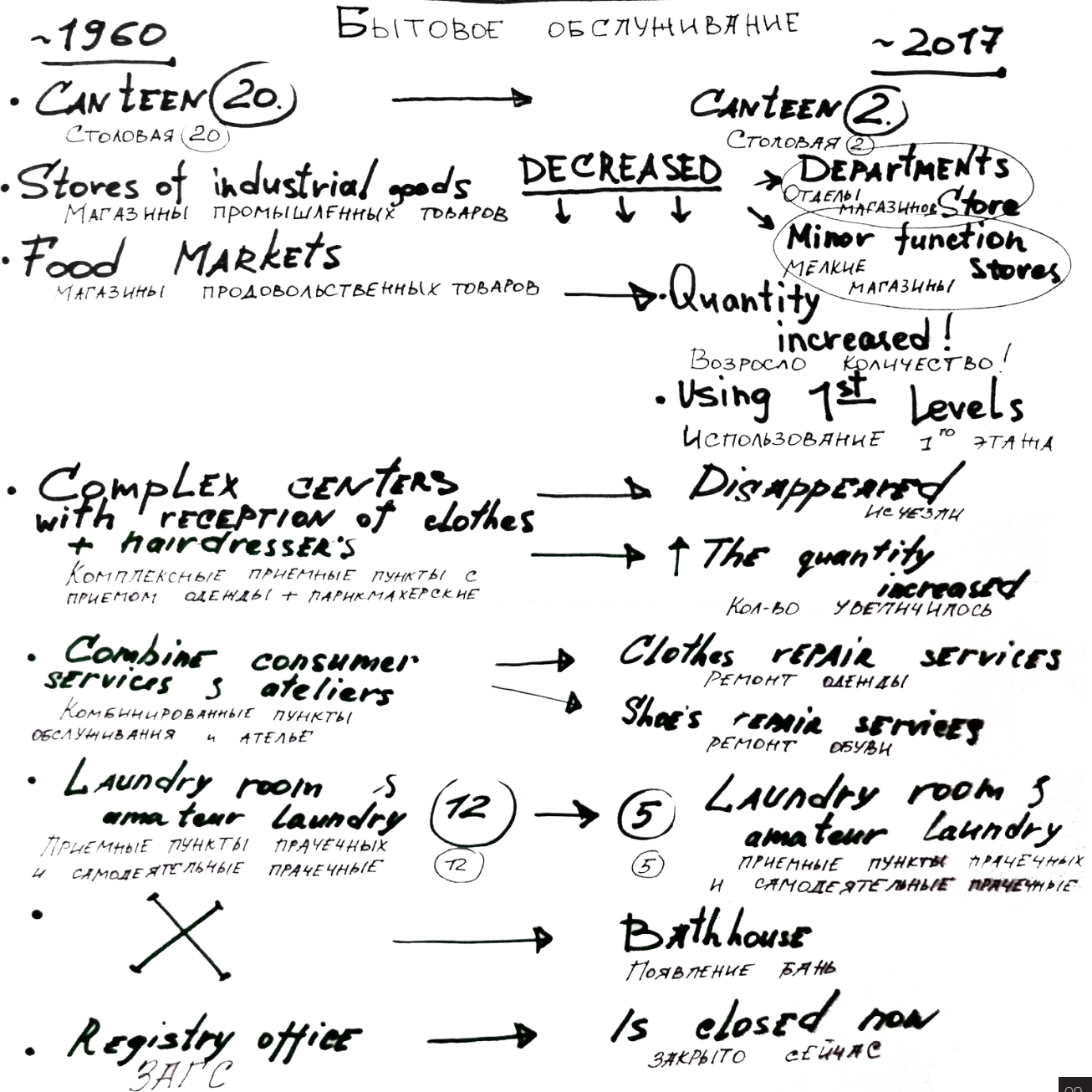


07.

- | | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><u>CULTURAL</u></p> <ul style="list-style-type: none"> - library - cinema - pioneer house - clubs and specialized clubs | <p>→</p> <ul style="list-style-type: none"> - library - cinema - school of early development - school of arts and crafts - sport school - musical school | <p><u>MEDICAL</u></p> <ul style="list-style-type: none"> - pharmacy - polyclinic - hospital - pharmacy - dispensary - polyclinic - hospital - poly-clinic centre - medical centre - healthcare centre - diagnostics centre |
| <p><u>Educational</u></p> <ul style="list-style-type: none"> - kindergarden - school - research institute - college | <p>→</p> <ul style="list-style-type: none"> - kindergarden - school - research institute - institute - college | <p><u>Places of worship</u></p> <ul style="list-style-type: none"> - orthodox churches |
| <p><u>ADMINISTRATION and public functions</u></p> <ul style="list-style-type: none"> - bank - courts - administration - communication services - post telecentre - housing cooperation office | <p>→</p> <ul style="list-style-type: none"> - bank - courts - administration - new office fun - communication services - post radiostations - housing cooperation office | <p><u>Industrial</u></p> <ul style="list-style-type: none"> - factories - factory - sport recreational - administration |
| <p><u>Sport</u></p> <ul style="list-style-type: none"> - multifunctional sport children and youth centres - sport grounds - ice-skating ring | <p>→</p> <ul style="list-style-type: none"> - sport clubs - fitness-centers - gyms - sport grounds - 2 ice-skating rings | |

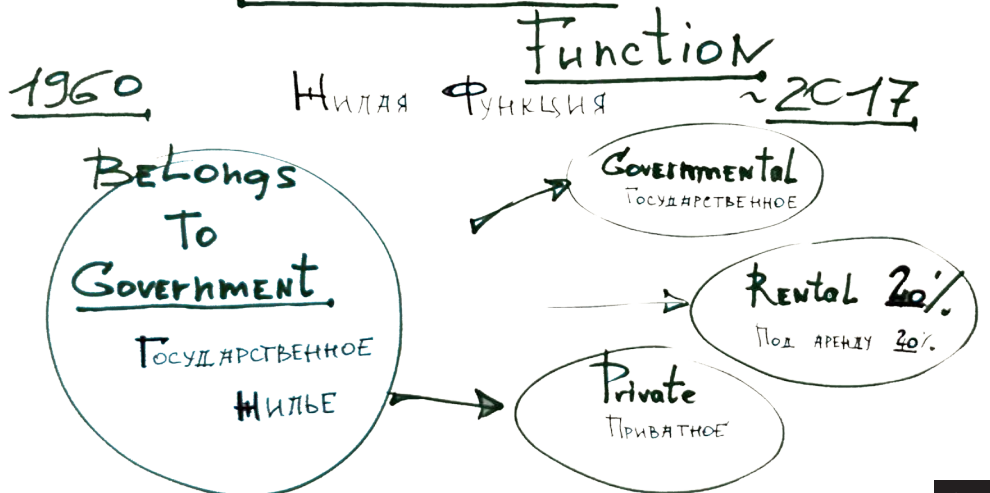
08.

Daily services & Facilities

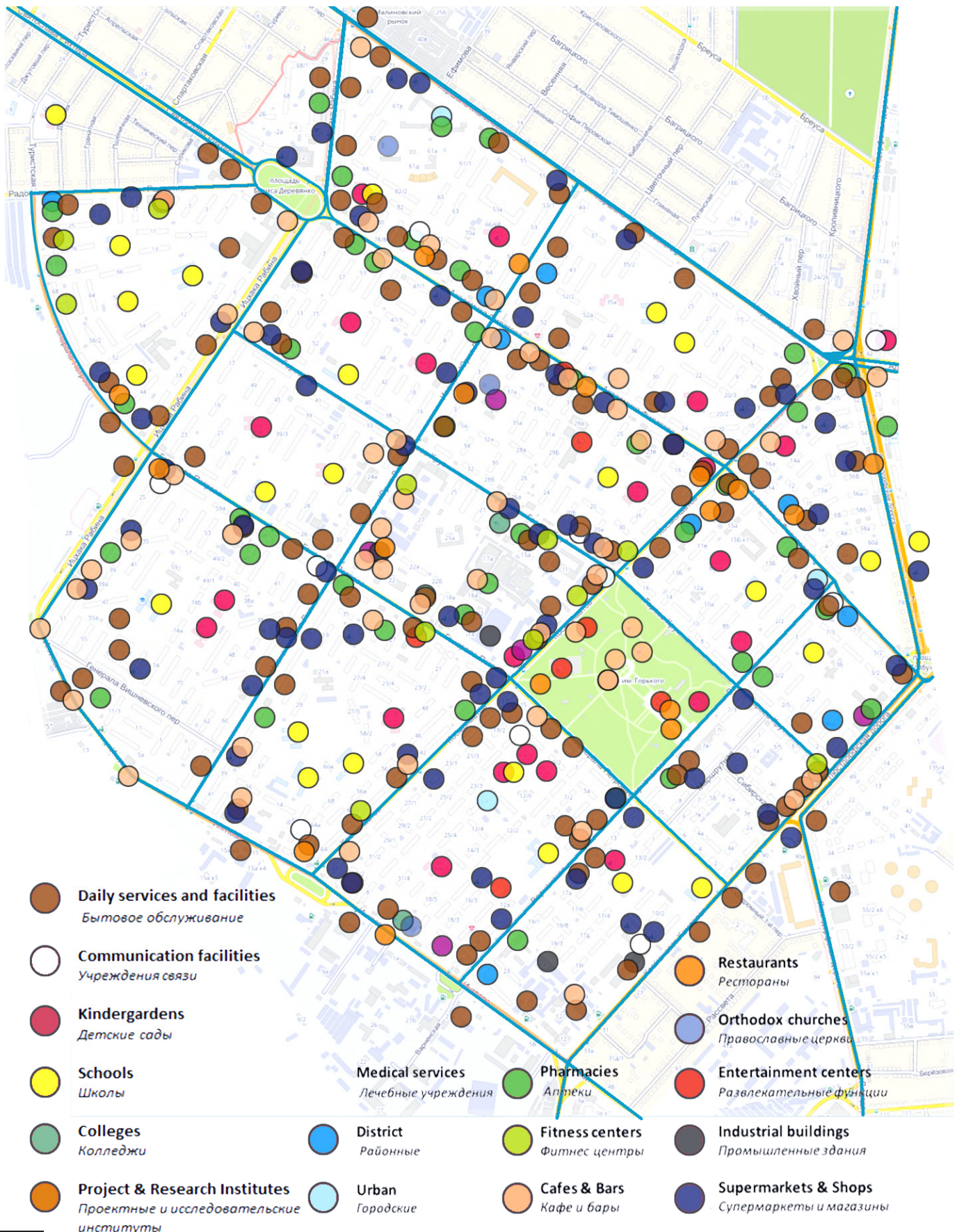


09.

Residential

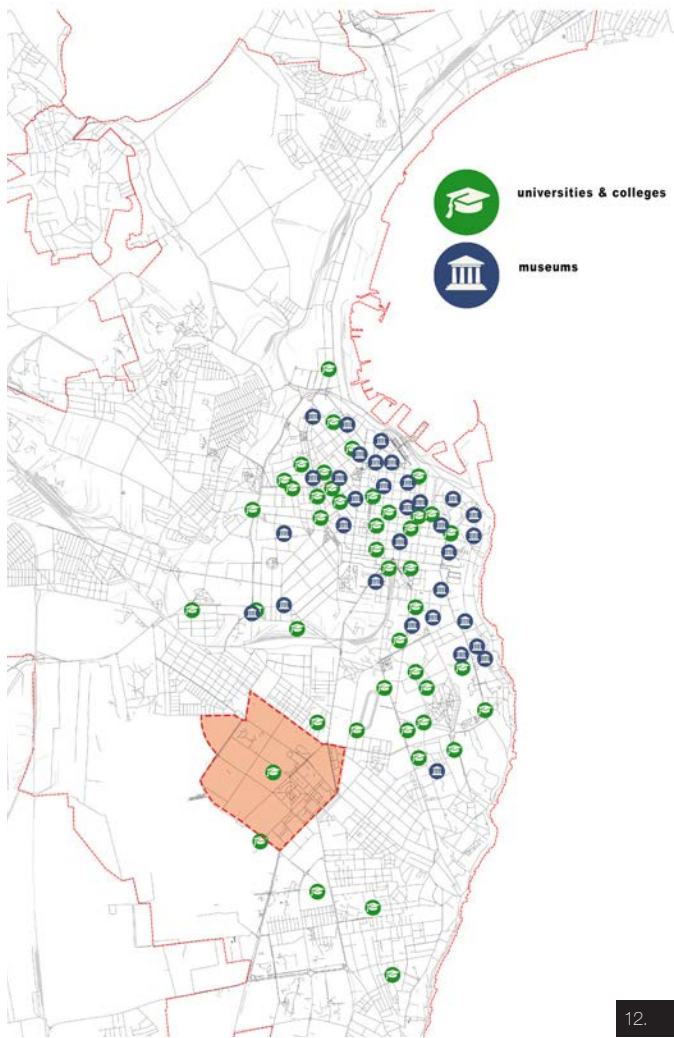


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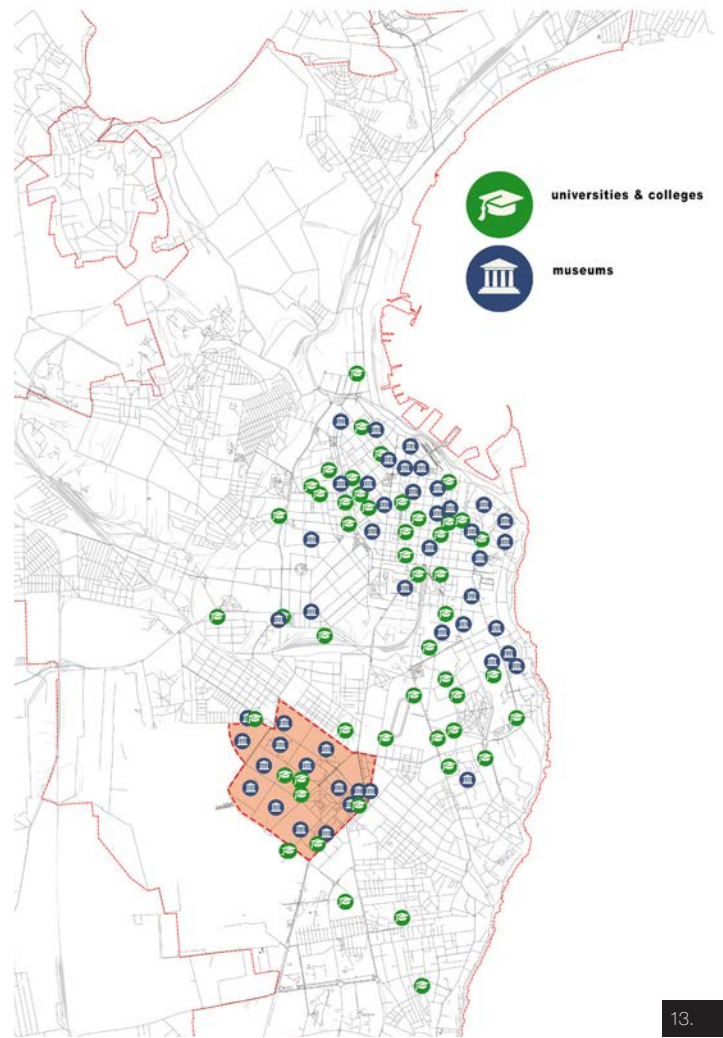


11.

- 7 Scheme showing the transformation of functions from the initial project till the current conditions
- 8 Cultural, educational, administrative, medical and other functions in Cheryomushki, their initial and current condition
- 9 Service function in Cheryomushki, its initial and current condition
- 10 Residential function in Cheryomushki, its initial and current condition



12.

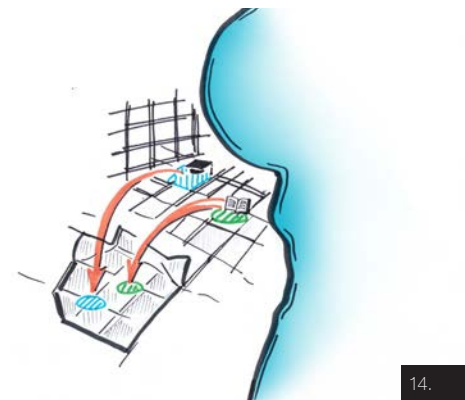


13.

Situation with schools is almost the same. The main change is that school territory lost its function. Sports grounds are in decline; many schools lack sport equipment on their territory. The Odessa Financial Technical School (today - Odessa Financial and Economic College) has been preserved. A branch of the Kiev National Trade and Economic University was opened right there. Despite its number of population (125,000 people), Cheryomushki houses only one higher education institution which obviously is not enough. A large number of students have to go to other parts of the city to obtain the variety of professions. It causes daily shuttle migration which in its turn leads to regular rush hour traffic.

The main medical center remains the 10th city hospital, which serves the entire city. In addition, a private multidisciplinary medical center was opened here in the early 2000s. There once were 2-3 large medical facilities per each district. Nowadays, they are only a few left, except of several private dental offices located in almost every quarter. However, there are two maternity hospitals and women's clinics which still continue to function.

Sports function was represented by local sports grounds and those situated outside the schools' buildings, and also by youth sports schools, which combined various sports activities. Today the function of such sports schools is lost, seven existing ones have a non-diversified character.



14.

- 11 Scheme showing the spread of functions in Cheryomushki today
- 12 Location of the educational facilities in relation to Cheryomushki
- 13 Location of the existing and newly proposed educational facilities in relation to Cheryomushki
- 14 Sketch showing the relocation of educational and cultural facilities



Functional analysis of existing situation /
Функциональный анализ исходной ситуации

- public buildings
- residential buildings with public function
- residential buildings
- storages and garages / гаражи

Working places / рабочие места

- office / офис

Cultural function/ культурная функция

- library / библиотека

Daily-service functions/ Функции обслуживания

- cafe / кафе
- hairdressing / парикмахерская
- product shop / продуктовый магазин
- post office / отделение связи
- bank / банк

Sport function/ Спортивная функция

- gym / спортивный зал

Medical function/ Медицинская функция

- pharmacy / аптека
- hospital / медицинский центр

Educational function/ Образовательная функция

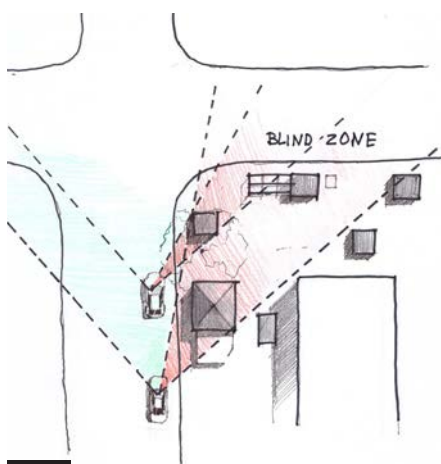
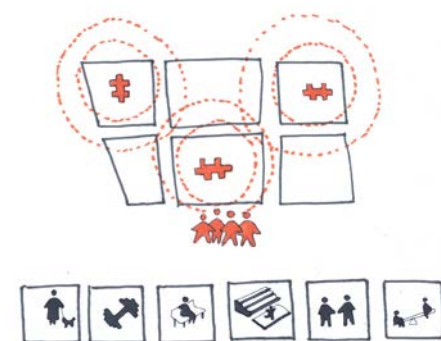
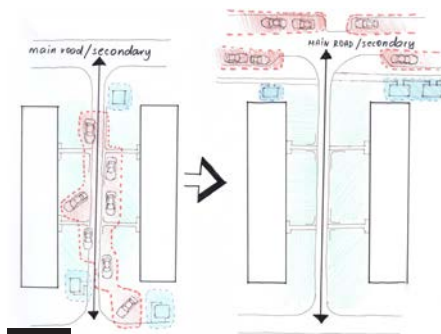
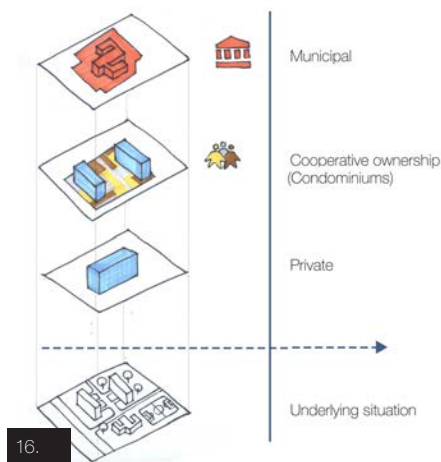
- kindergarten / детский сад
- school / школа
- high education / высшее учебное заведение

Administration function / Административная функция

- administration / администрация

Places of worship / Культурные сооружения

- orthodox church / православная церковь



15 Functional analysis of existing situation

16 Scheme showing 3 type of property to be implemented in the district

17 Sketch showing the possible solution for the parking problem

18 Scheme showing the modern use of schools' territory

19 Scheme showing problems with visibility and safety at intersections

The function of public catering which was carried out by canteens on the premises of different manufacturing facilities, schools and colleges, has been developed into private cafes, bars, and restaurants.

It is also worth noting that the organization of cultural functions in Cheryomushki is rather poor. It only consists of the „Moscow“ cinema, built in the 1960s and located in Gorky Park and several libraries which are no longer as popular as before in the 20th century. Museums and theaters had not been part of the original design and have not appeared over time.

And thus, the original idea of Cheryomushki in the 1960s that had proposed a concept of „a city within the city“ have been transformed into a “sleeper” neighborhood.

2. Planning goals.

The enhancement of the population’s quality of life in Cheryomushki on each of the four scales - city, district, quarter and courtyard. Our group aims to introduce the missing functions and reorganize existing ones for the bene

fit of the inhabitants, to form public spaces along the meridional streets with further concentration of the human flows, and to return the function of social accumulator to the yards.

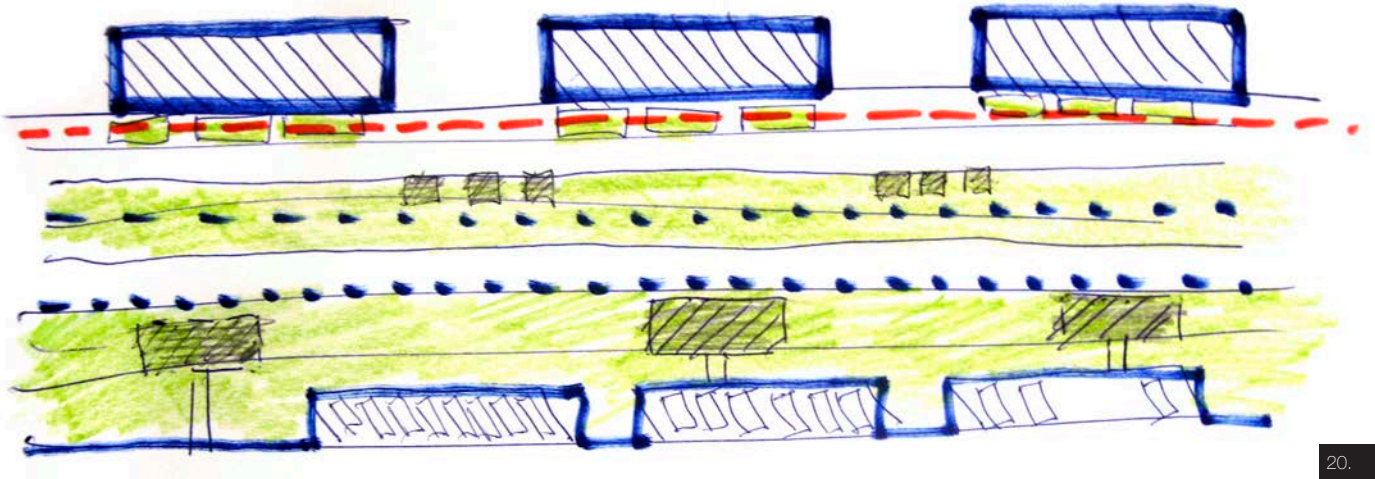
3. Scenarios

Our first district scenario is based on introducing the function of higher education institutions into the structure of the district. Therefore, a significant number the inhabitants of Cheryomushki will include students and young scientists, who in their turn will enable further development of the housing function. A large number of apartments will be rented; dormitories, hostels and hotels will appear. The cafes, confectioneries and bakeries will flourish, and thus the public spaces will be activated. The establishment of summer theaters and nightclubs, reorganization of libraries into media libraries and hubs will also be possible.

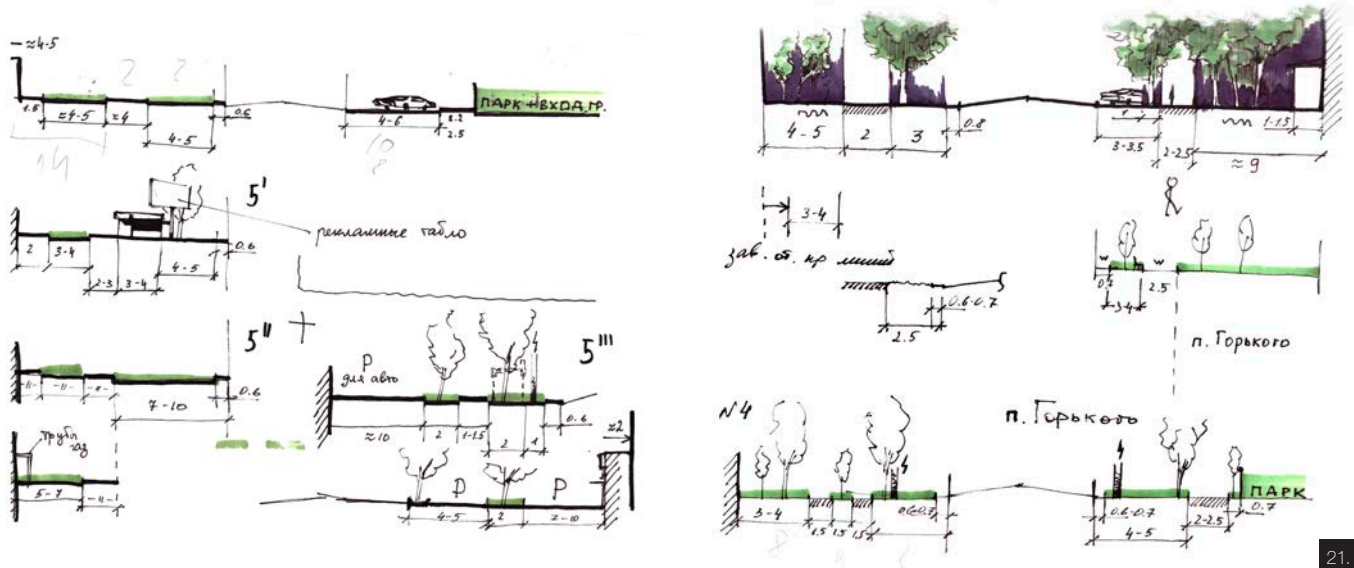
The second scenario focuses on the ageing of the population. The adjacent territory within the yards will turn into an area for meetings, recreation and gardening. There will be no need for a large number of sports grounds. The entire infrastructure and health-care facilities will be concentrated in a minimum radius of accessibility. It will also be possible to reorganize dormitories into nursing homes. The problem with parking spaces will be solved - older people do not use personal transport as much as middle age groups. And thus, the public transport will prevail and will be further developed (trolleybuses and trams will be the priority).

Of course, the first scenario implies the evolution of the district. Younger age groups are more likely to be involved in the development processes of their district.

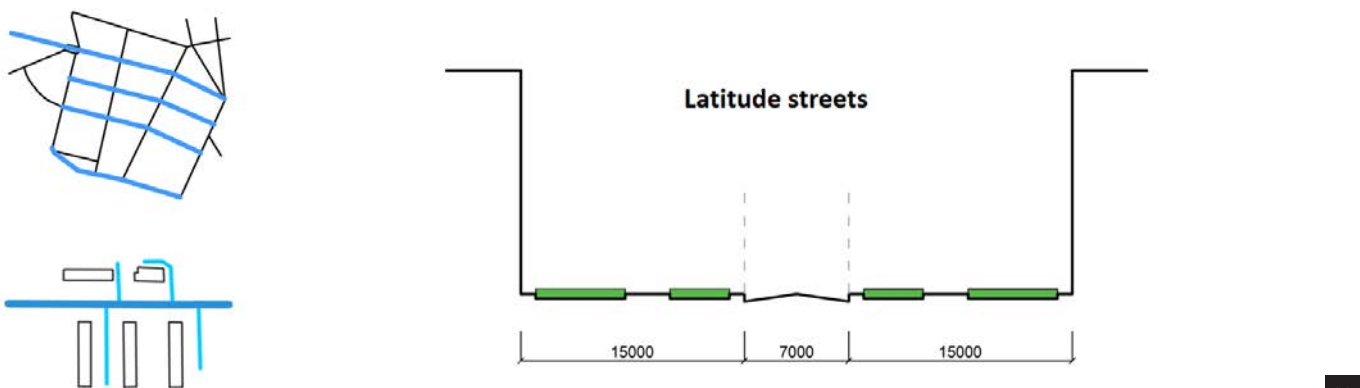
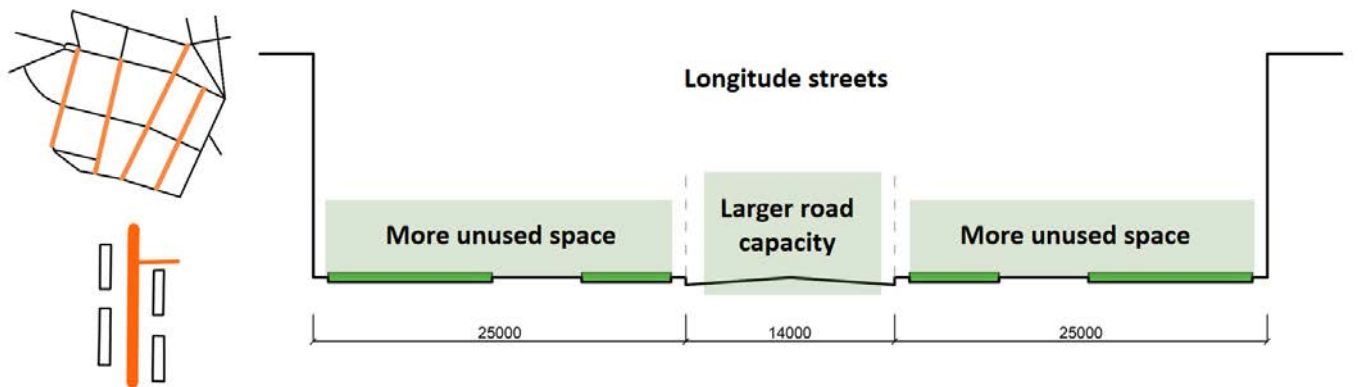
We also worked on a scenario in the scale of the courtyards, which we analyzed according to 3 types of property. The first type suggests



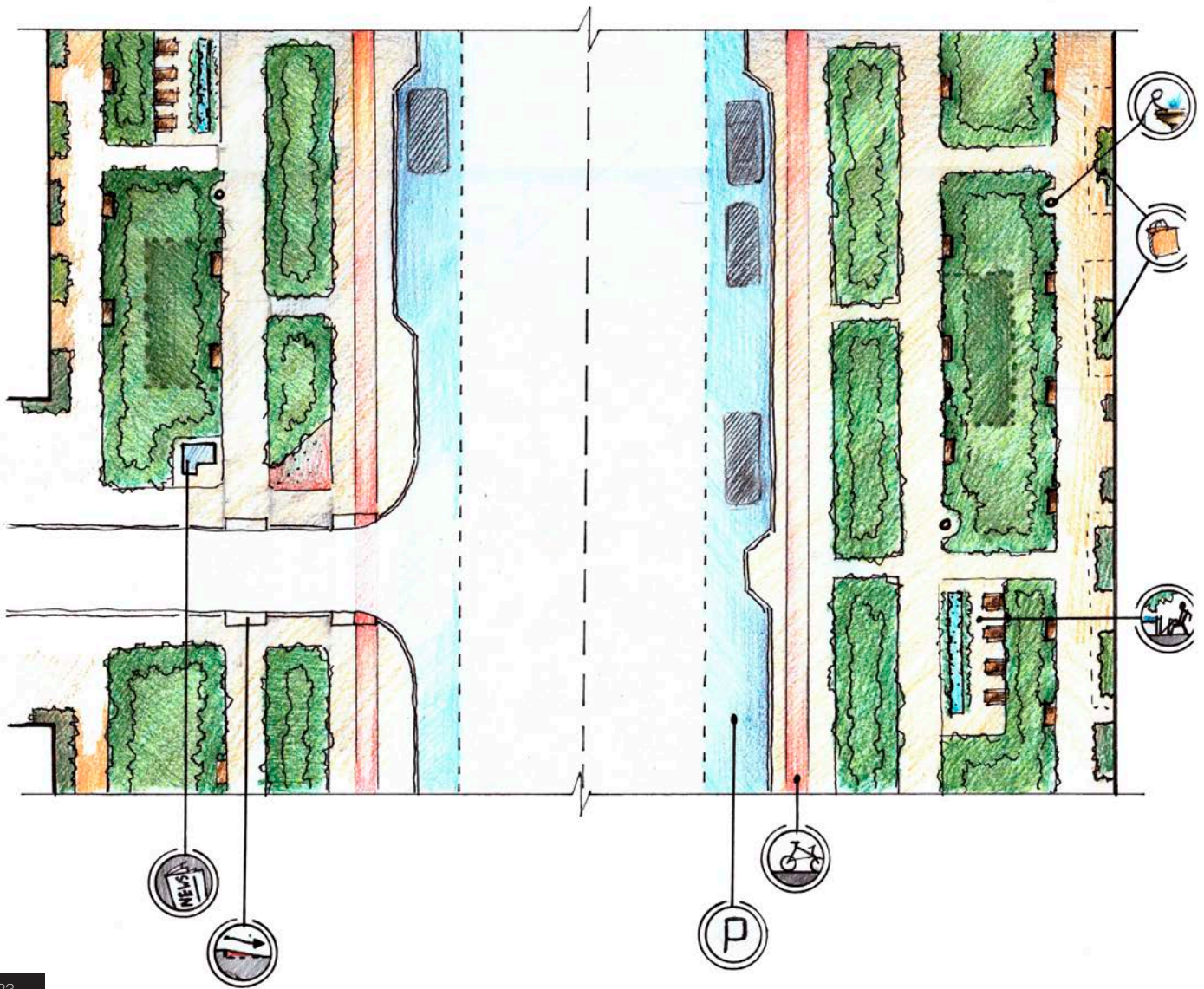
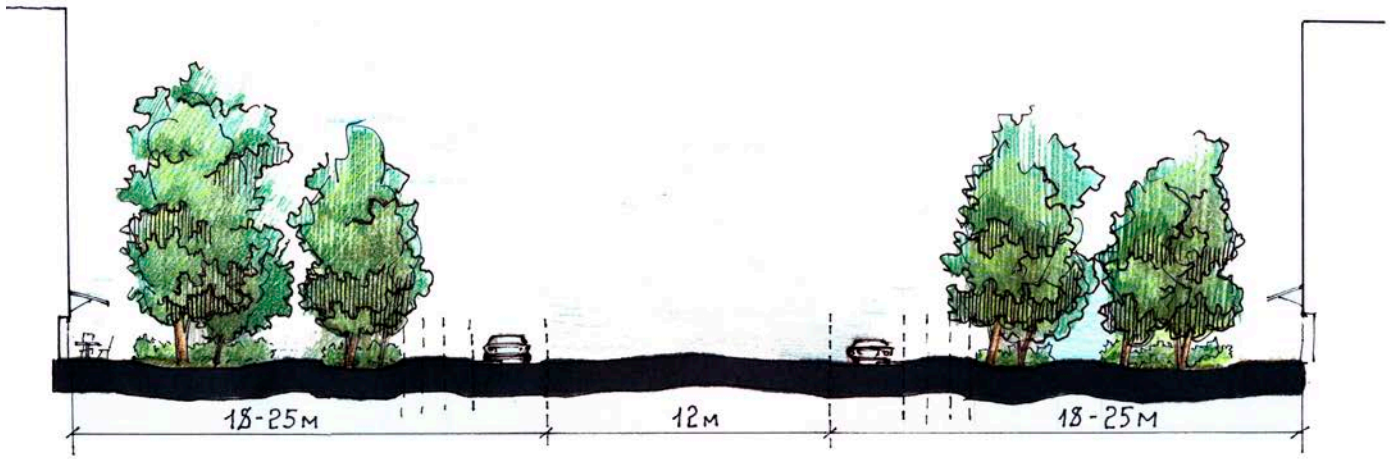
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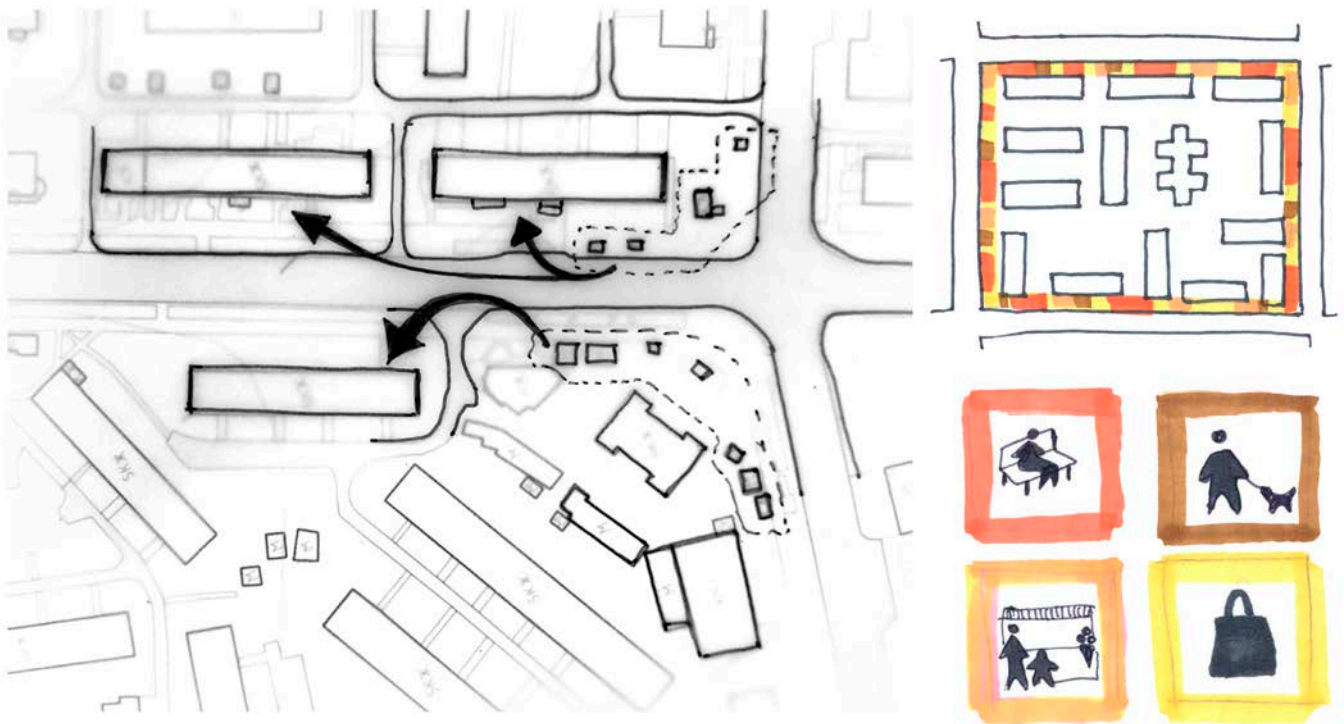
23.

20 Scheme showing the development of linear public spaces in a random way

21 Sketches of the streets' sections

22 Comparative scheme of the longitude and latitude streets

23 Sketch of the possible solution for the longitude streets



24.

the fusion of multi-storey housing block owners into one organization – condominium. All decisions concerning the construction on the outdoor territory of houses and the transformation of the territory are made by the members of the condominium during their meetings. Tenants decide for themselves what additional functions should be implemented in their courtyards. We, as architects, should make a list of crucial functions for their courtyards and find a balance of each of this functions. The second option is the private property when each person or entity can claim a certain part of the adjacent territory. In this case, the space around the houses will turn into a “patchwork”. Private owners will use the land parcels for their needs – as a garden, a sports ground, an alcove, a kiosk, etc.

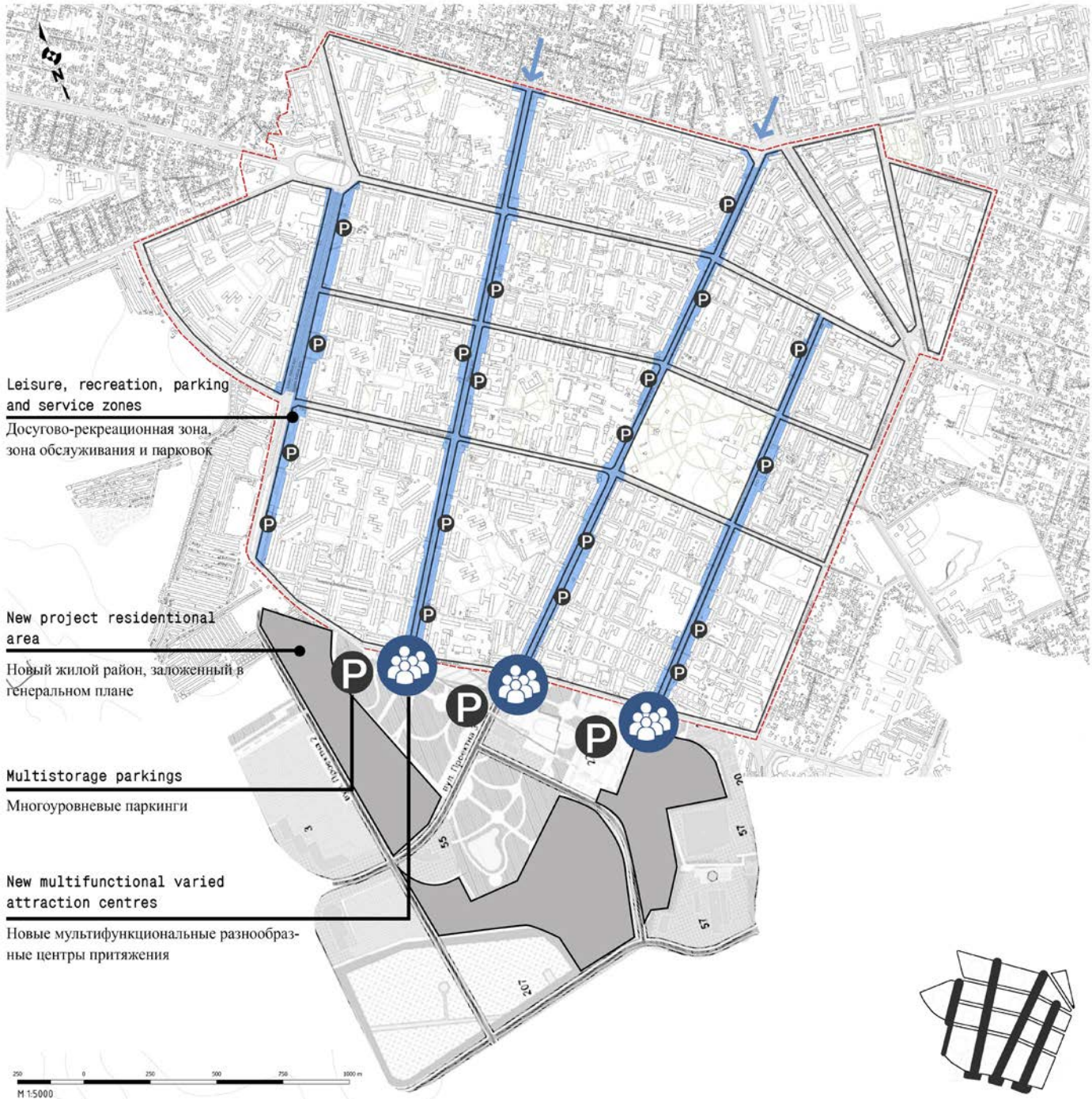
Under conditions of the third form of ownership, when the adjacent territory belongs to the municipality, a special organization is responsible for the improvement, which is assigned by the city authorities or residents of the adjacent houses. Such organization develops a functional zoning of the yard and its landscaping. Therefore, people get a common space for communication and recreation. Moreover, after the permission of the authorized bodies, small business can be situated in the local area.

The most optimized scenario for the development of the adjacent territory is the condominium. It allows to exploit the function of the yard as a social accumulator to its full potential in a similar way to the traditional Odessa court.

4. Conception

Taking the mentioned above scenarios into account, we have built up certain concepts for each of the explored scales. In the city scale we plan to implement educational and cultural functions by opening branches of the existing universities of Odessa here in Cheryomushki (e.g. Odessa I.I.Mechnikov National University, ONPU and ONAFT, new non-governmental universities, museums

24 Reorganization of the trade and service functions within the quarter 's perimeter



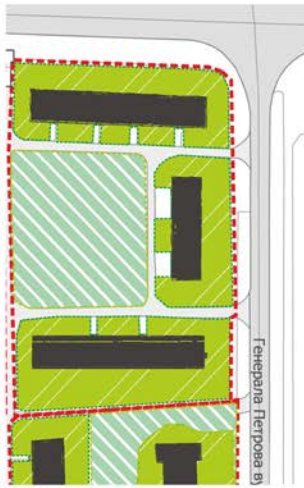
25.

and exhibition grounds, event-related zones and facilities etc.).

In the district scale we aim to reorganize the open linear spaces along the meridian streets into leisure, recreational, service, trade and parking zones. It will partially reduce the outward migrations from Cheryomushki. We also find it essential to clear the yard area from illegal parkings and garages.

In the yard scale we intend to enable a differentiation of the yard territories according to three forms of ownership (municipal, private and collective ownership).

A // U-type



B // parallel-type



C // enclosed type



Condominium property

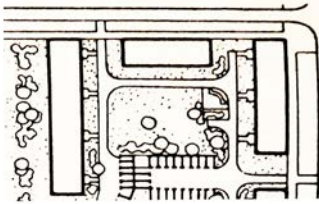
Private ownership

Municipal property

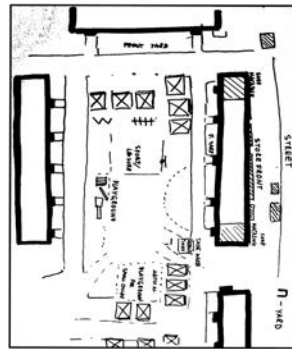
Borders of condominiums

26.

A - yard
П - двор



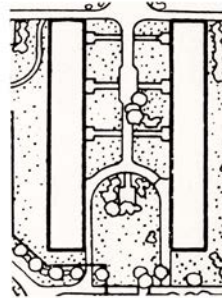
1960s



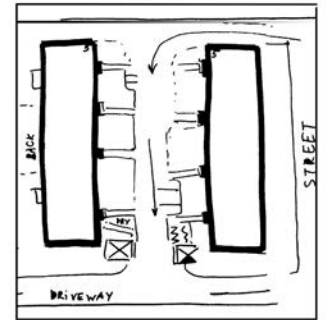
2017

27.

B - yard
Entrances facades yard | Двор - входные фасады



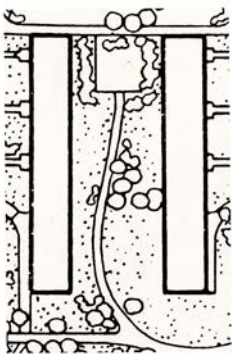
1960s



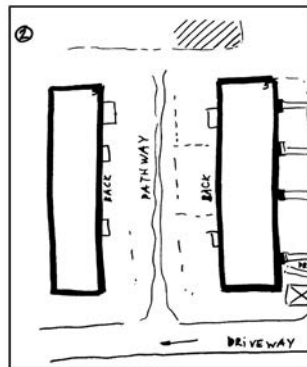
2017

28.

C - yard
Rear facades yard | Двор - задние фасады



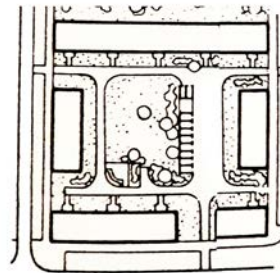
1960s



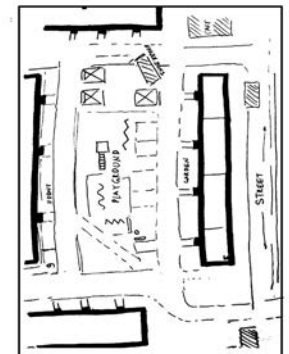
2017

29.

F - yard
Enclosed yard | Закрытый двор



1960s



2017

30.

5. Realization

In the district scale, we offer a clear sequence of steps to ensure the functionality of space. First of all, we implement the educational function on the basis of the emerged institutes in Cheryomushki, which, in varying degrees, have lost their initial citywide and, at times, even nationwide significance (research institutes, research and develop-

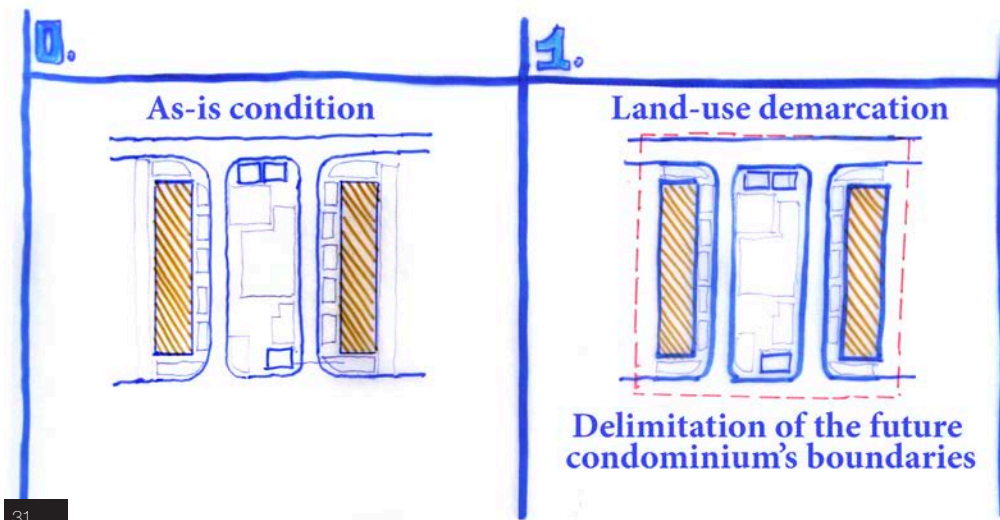
26 Scheme of the proposed land-use and boundary survey, Iuliia Frantseva, 2017

27 Typology of yards, Type A, Iuliia Frantseva, Sofia Bakanova, 2017

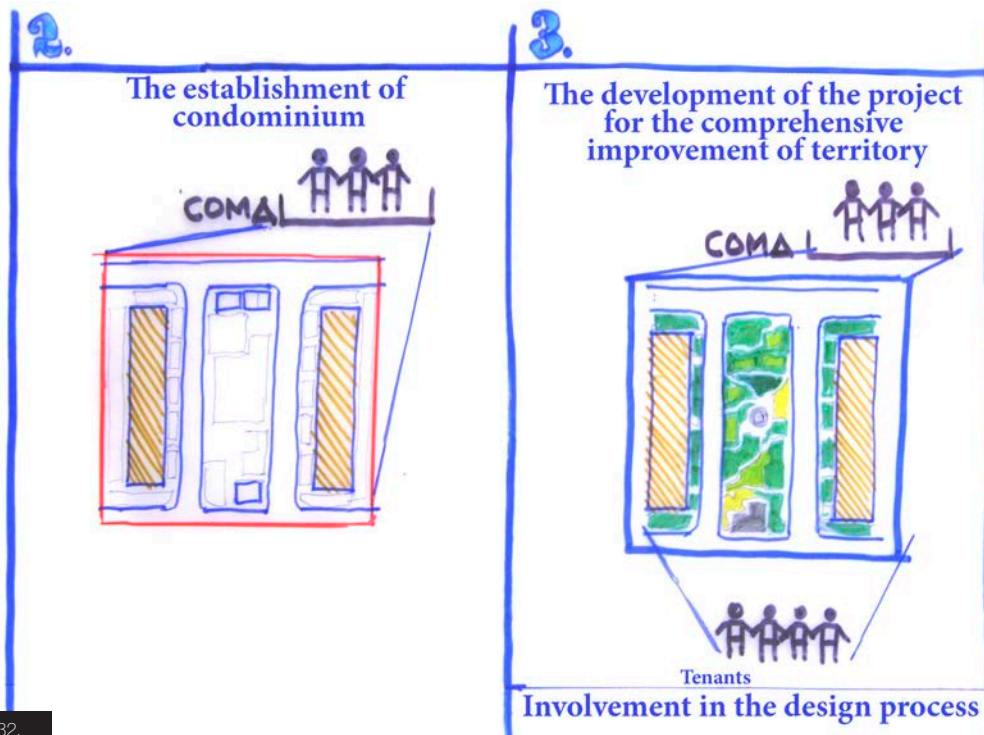
28 Typology of yards, Type B, Iuliia Frantseva, Sofia Bakanova, 2017

29 Typology of yards, Type C, Iuliia Frantseva, Sofia Bakanova, 2017

30 Typology of yards, Type F, Iuliia Frantseva, Sofia Bakanova, 2017



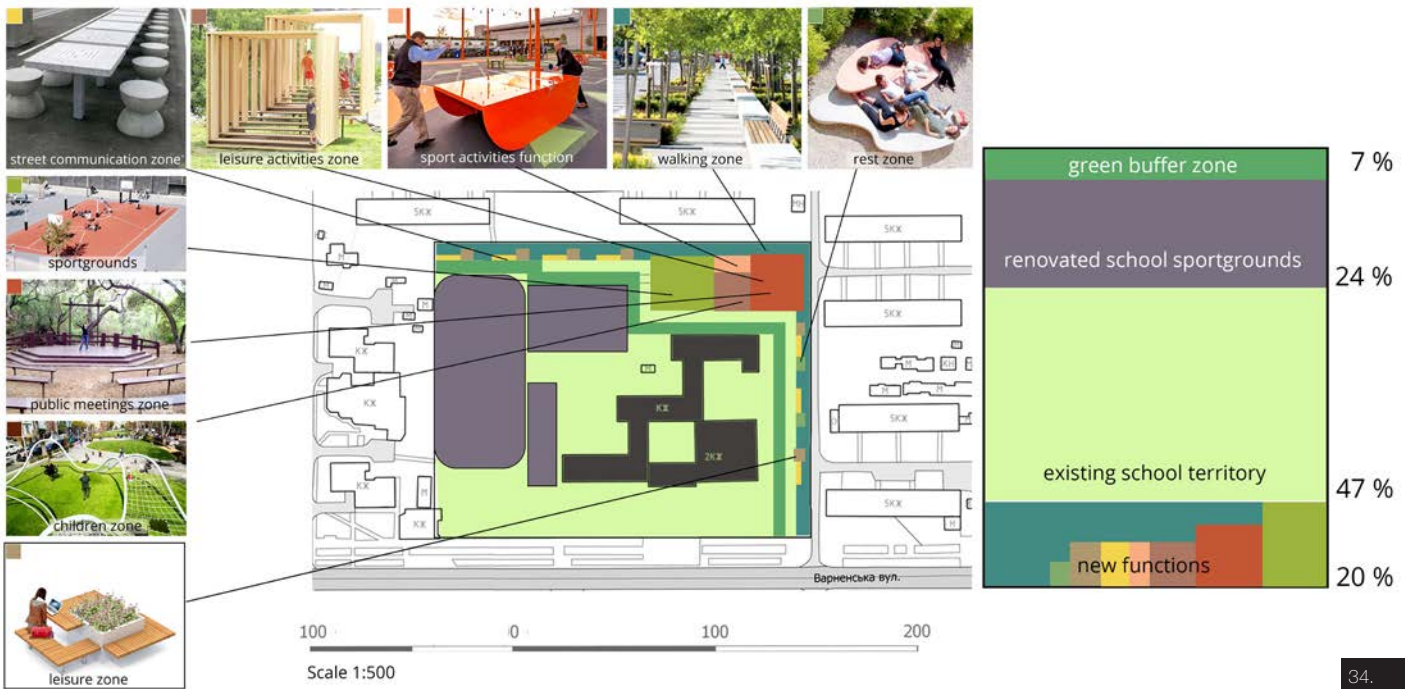
31.



32.



33.



34.

ment institutes, institutes of design and survey, design offices, etc.).

Secondly, we place educational and cultural functions at the available territories both on rental basis and by the governance of the municipality (the construction of the Open University of Science and Culture and other education and cultural facilities).

And finally, we situate cultural and education centers for different age groups within the existing school grounds. Since the number of educational facilities per each district was clearly defined by the regulatory system established even before the construction of Cheryomushki, there is a sufficient number of schools, which have enough space for any additional functions, and therefore, can be transformed into local centers of attraction for each quarter.

In order to meet our goal of transforming the street space we create a comfortable linear public space along the longitude streets and thus entice the functions of leisure, recreation, entertainment and parking to them. It would help to meet the wide range of popular demands and needs in Cheryomushki. Furthermore, according to the City General Plan of Odessa it is anticipated to build up multifunctional public and trading centers with multi-storey car parks. This approach will shut the structure of the longitude streets, thereby establishing functional magnets.

In the yard scale, as mentioned before, we suggest three ways of the differentiation concerning the land plot. Our team considers the establishment of housing cooperatives to be the most rational solution. We believe that the hand-over of the yard territory to the people who live in the adjacent houses will lead to cooperation and increase in responsibility for the yards. As an instrument of municipal control we suggest a set of land-use recommendations, which all housing cooperatives must follow in order to avoid the possibility of further functional degradation of the yard areas. These land-use recommendations would include identification and balance of functional zones and establish-

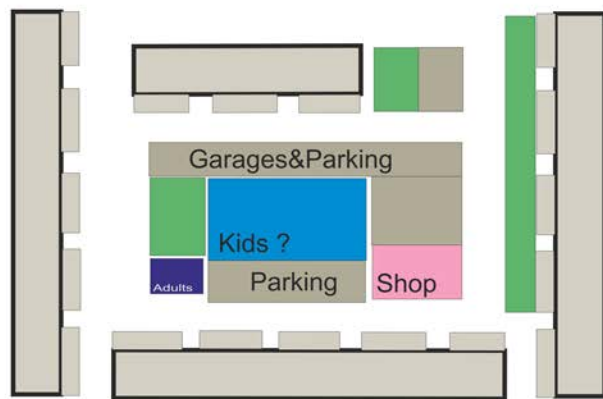
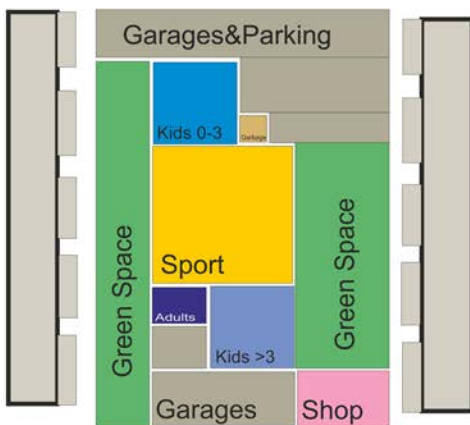
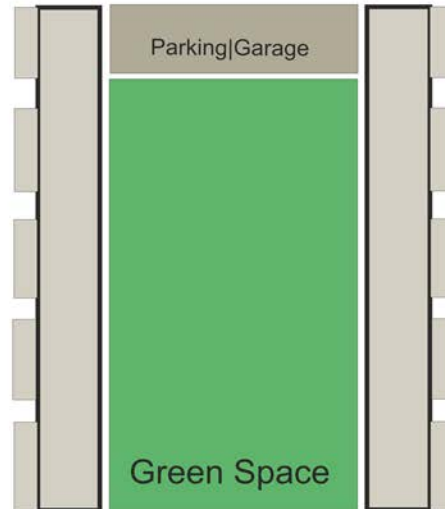
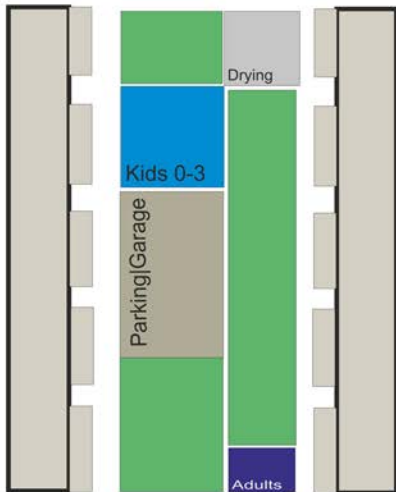
31 Scheme showing the land demarcation and land-use organization in the yards

32 Scheme showing the land-use organization in the yards

33 Scheme showing the land-use organization and maintenance of the territory in the yards

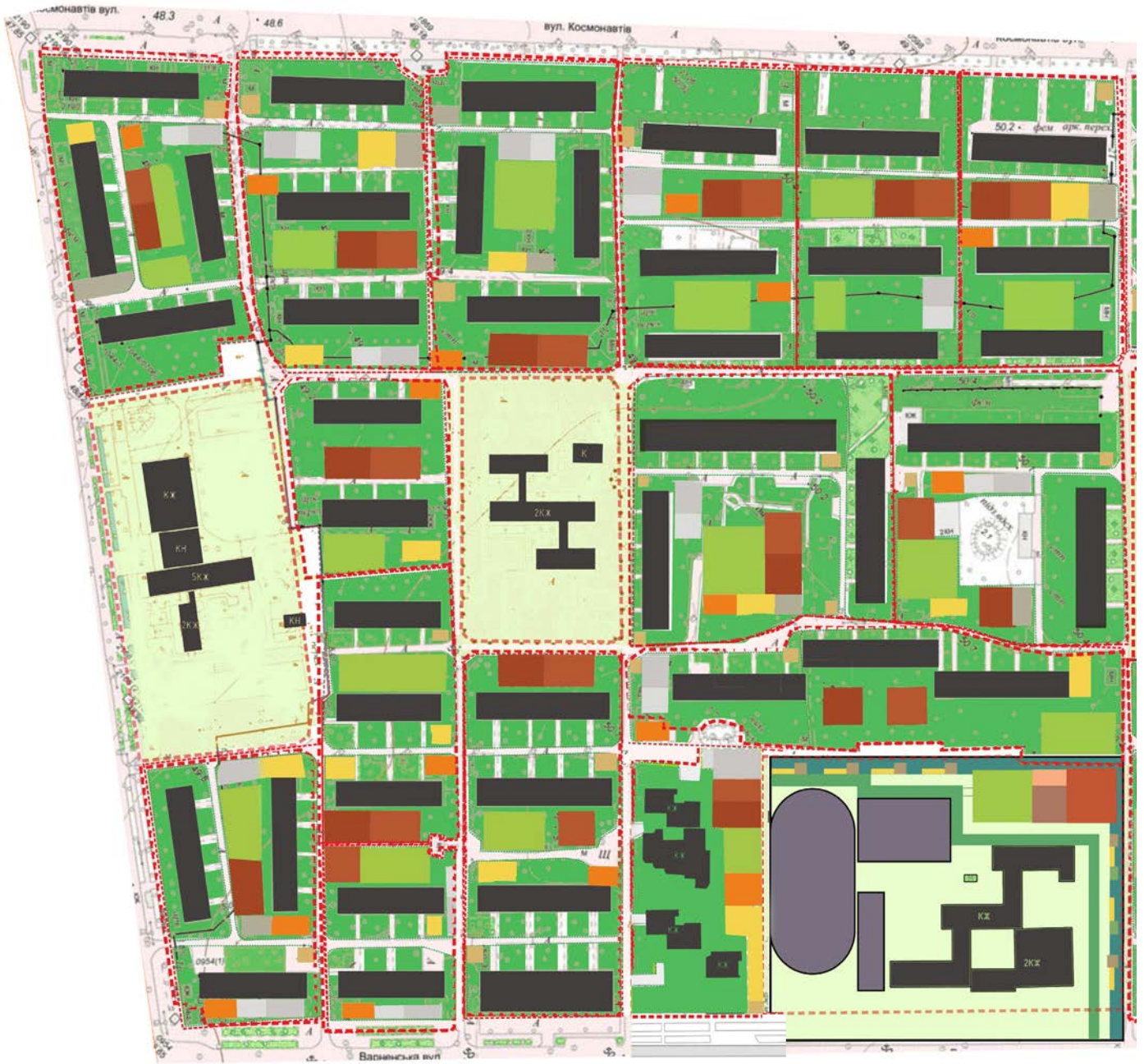
34 Scheme showing the basic approach towards the development of schools' territories

Out-of-balance condition in modern yards (2017)

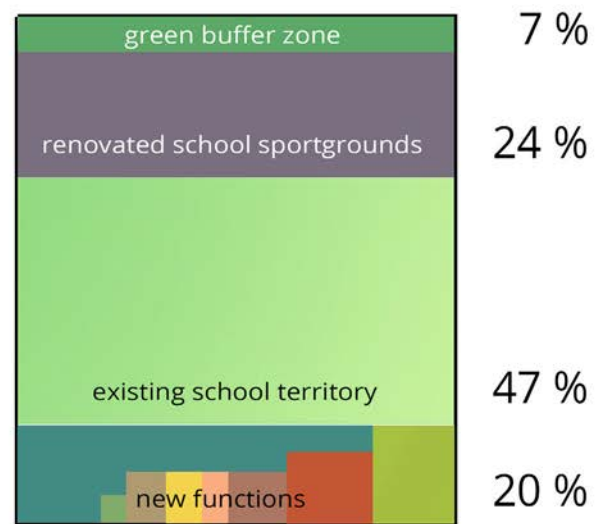
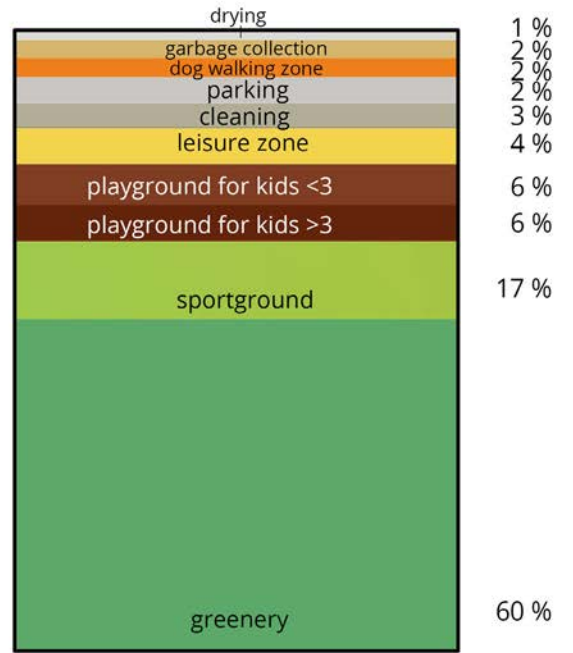
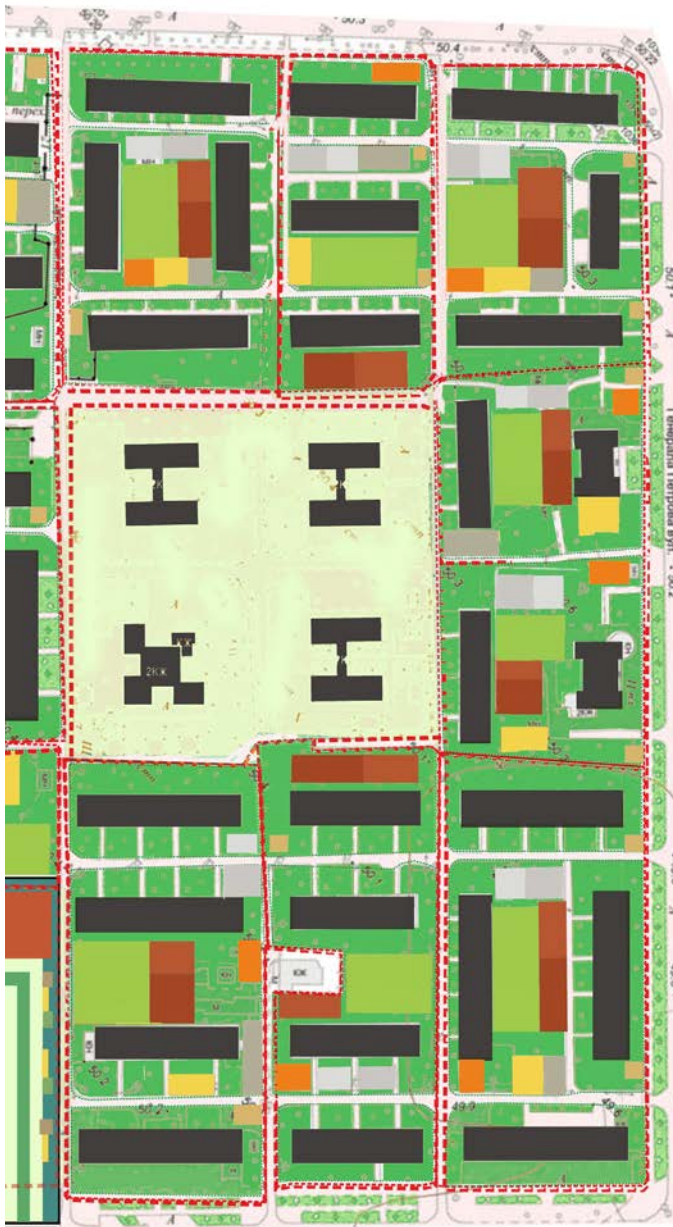


35.

ment of the list of limitations. Nevertheless, we do not exclude the implementation of other two variants, when the property is partly or entirely privatized or the ownership and control over the yards belongs to the municipality. However, they also must strictly adhere to land-use rules and recommendations. In order to fulfil this idea, we find it essential to remove the unauthorized parking and service function outside the inner space of quarters and to demolish garages in the yards.



38.






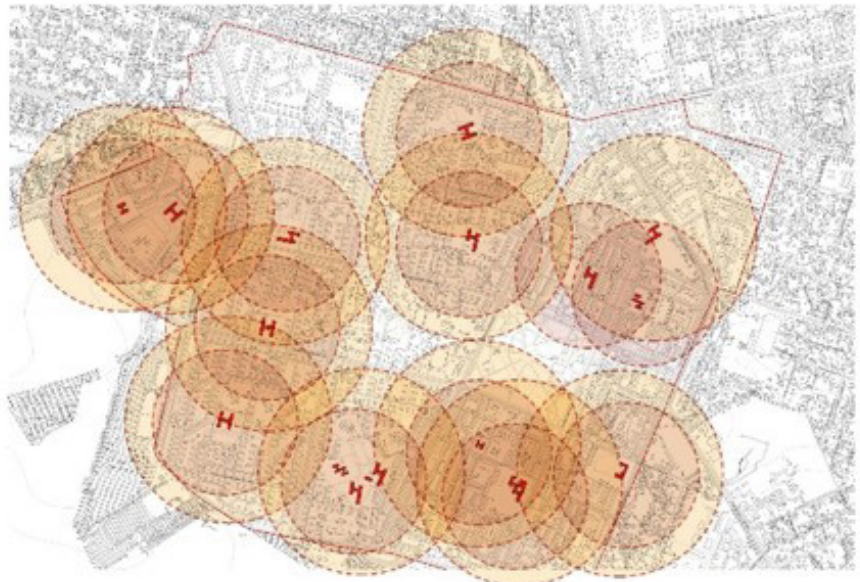


initial project

CONCEPT

C

-  education
-  competitions
-  communication
-  common discussions
-  children activities
-  museum
-  children activities
-  sport activities
-  dog walking zone
-  working days activity



C

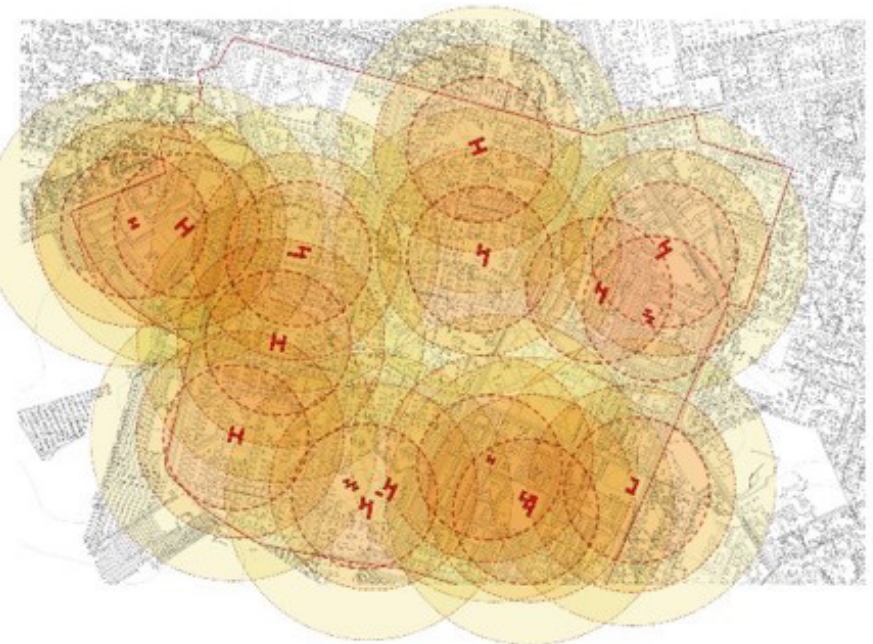
C

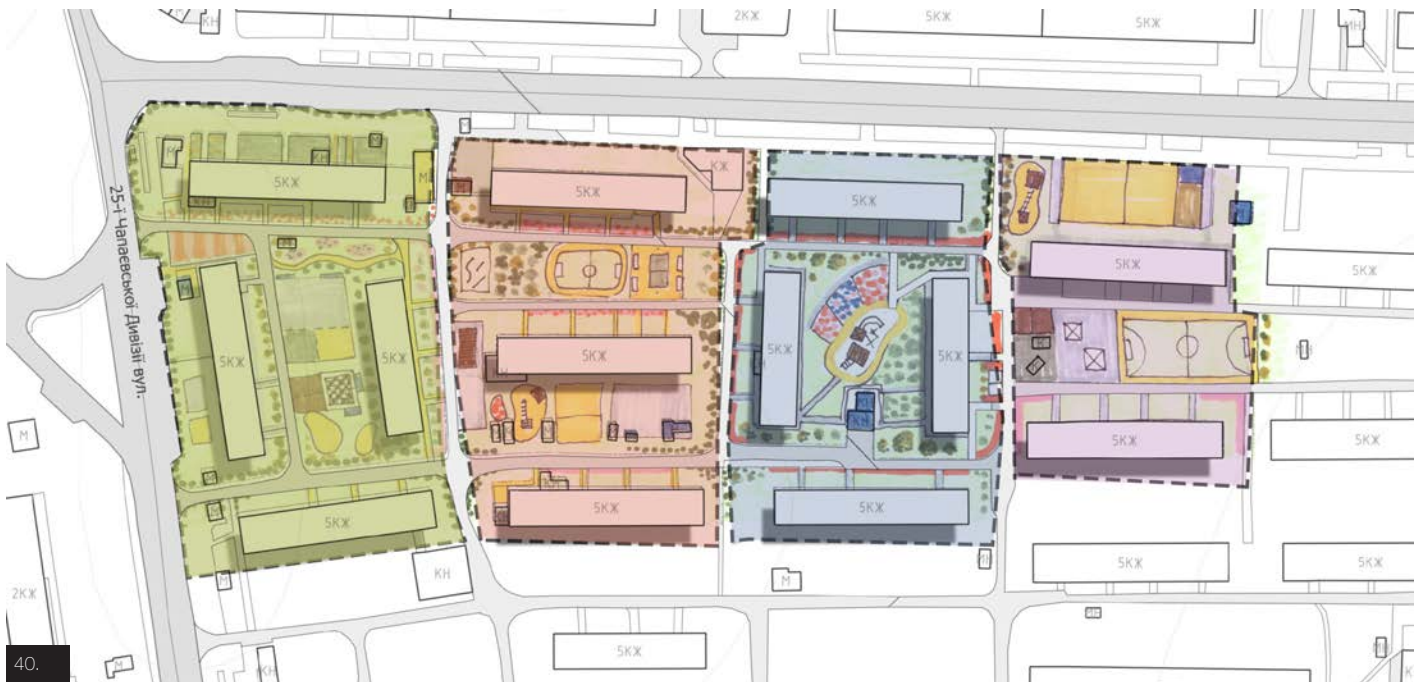
-  education
 -  communication
 -  children activities
 -  children activities
 -  sport activities
 -  dog walking zone
- nowadays

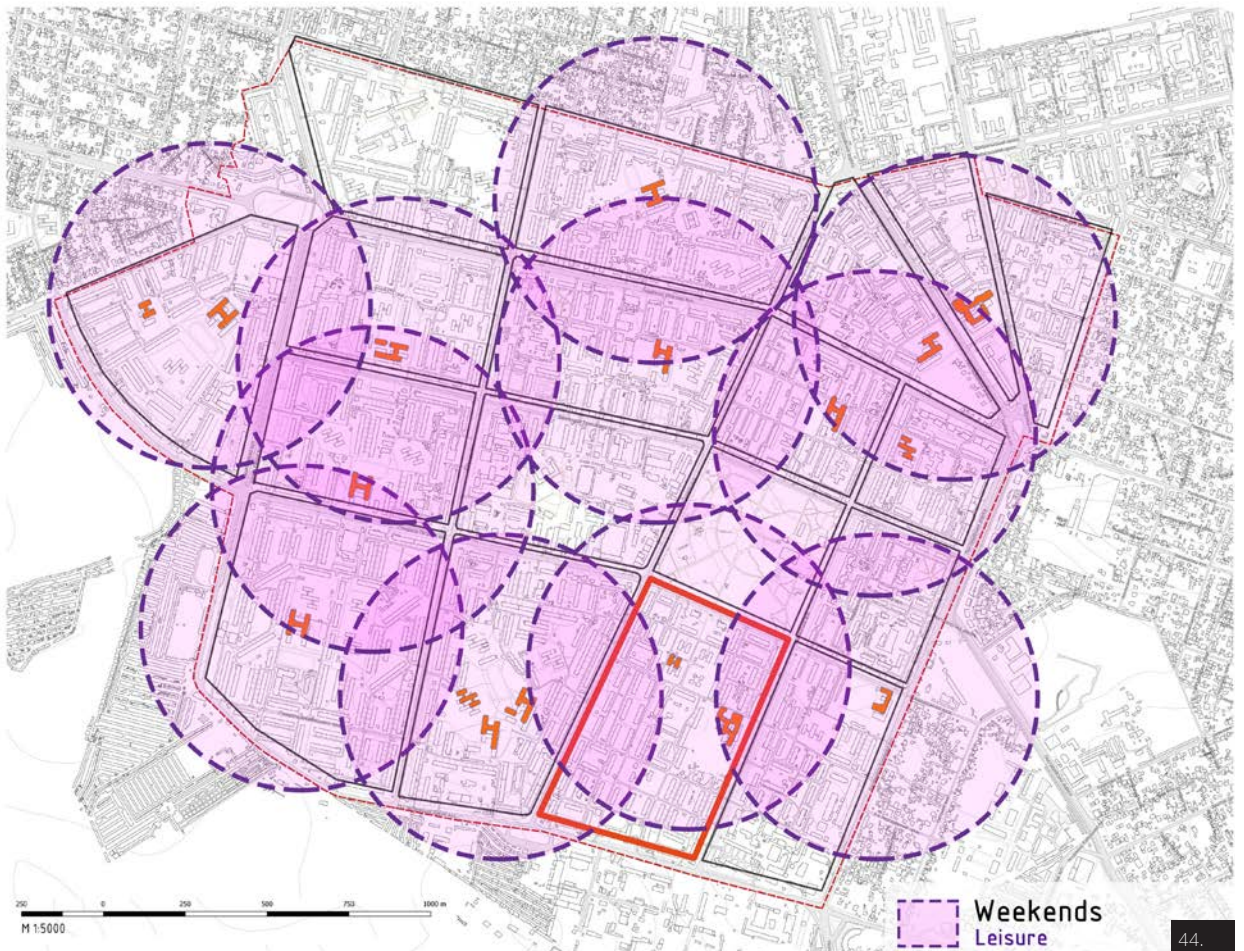
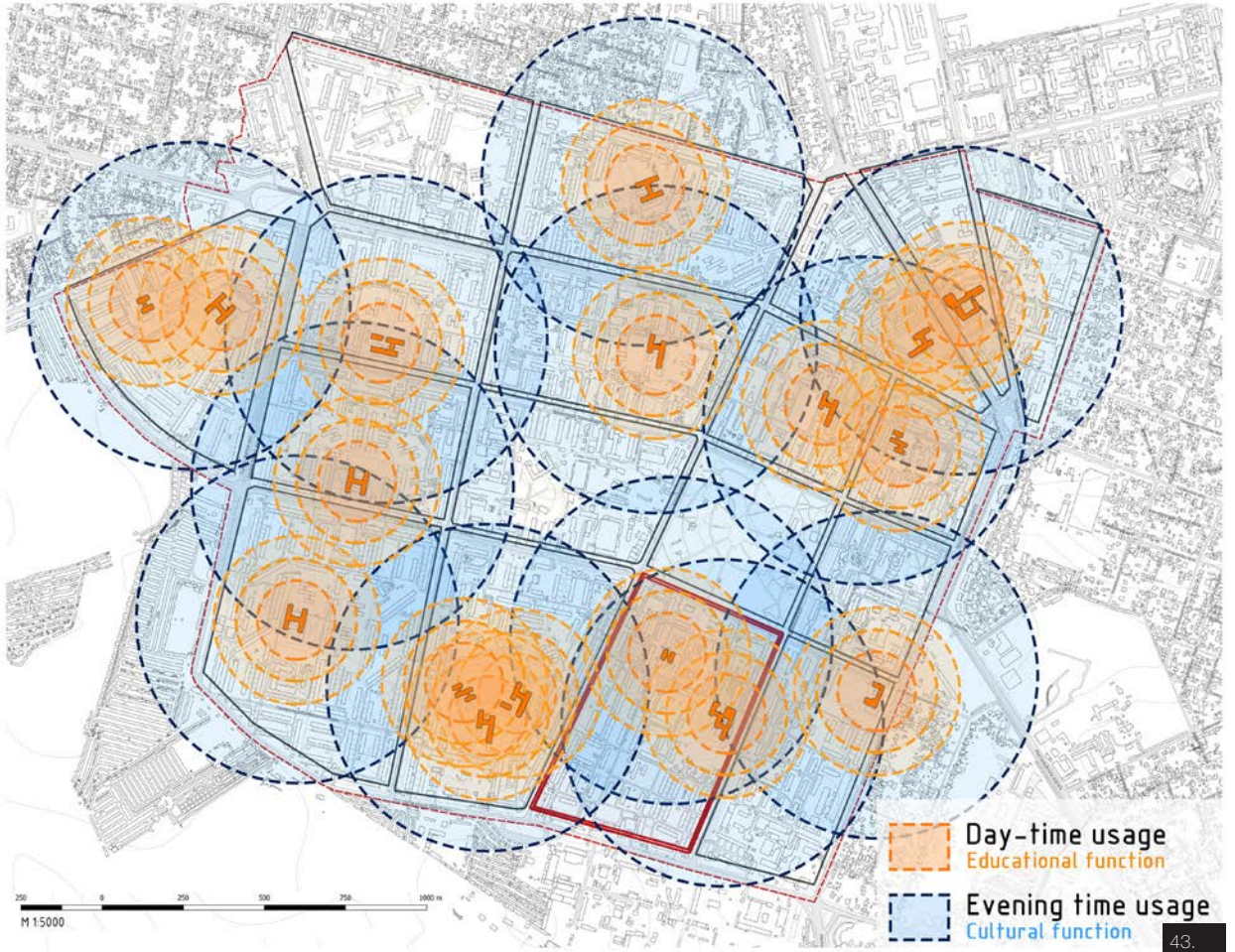


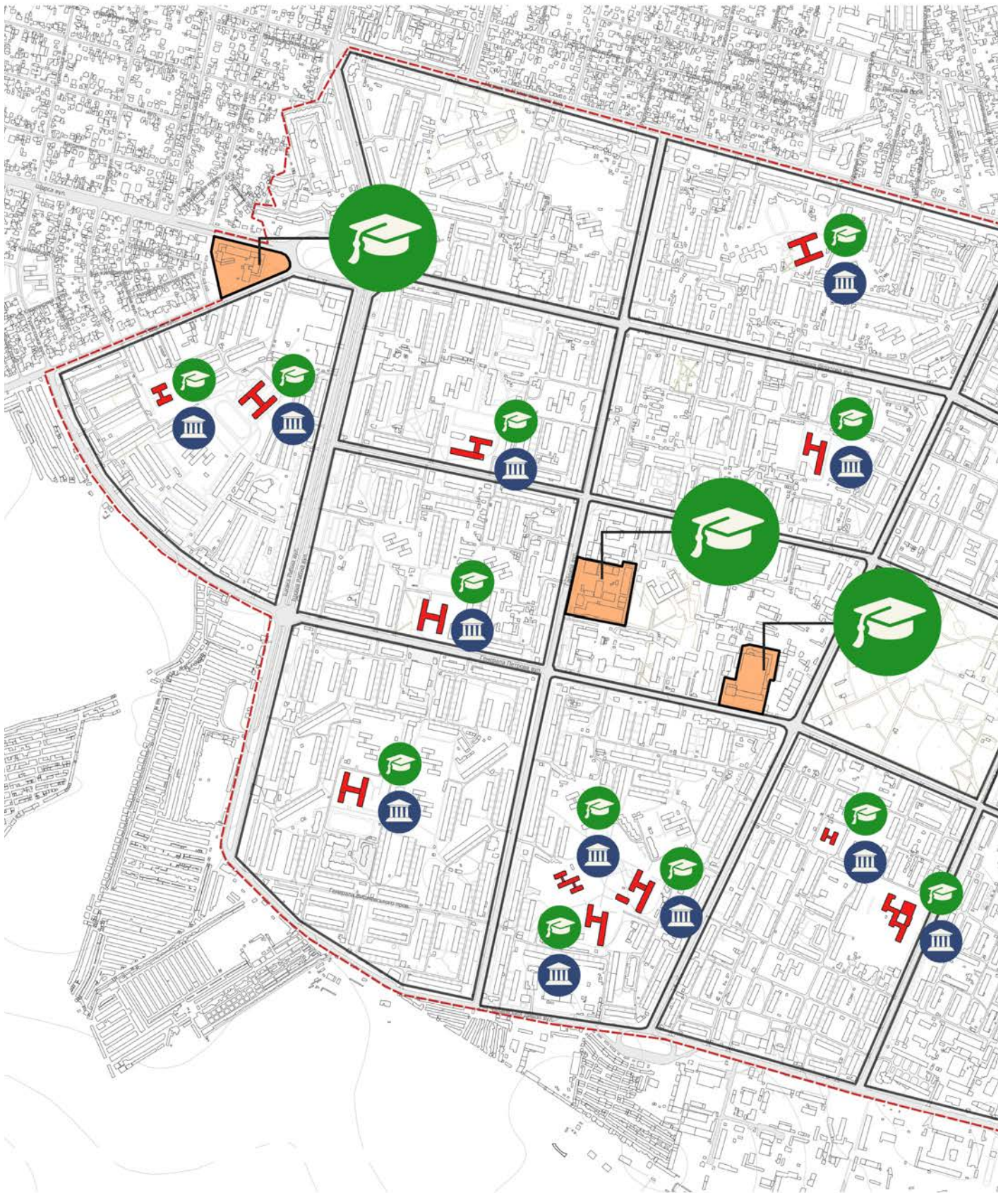
CONCEPT

-  education
 -  communication
 -  children activities
 -  children activities
 -  sport activities
 -  dog walking zone
 -  competitions
 -  common discussions
 -  museum
 -  fairs
 -  public lectures
 -  public presentation
- weekends activity

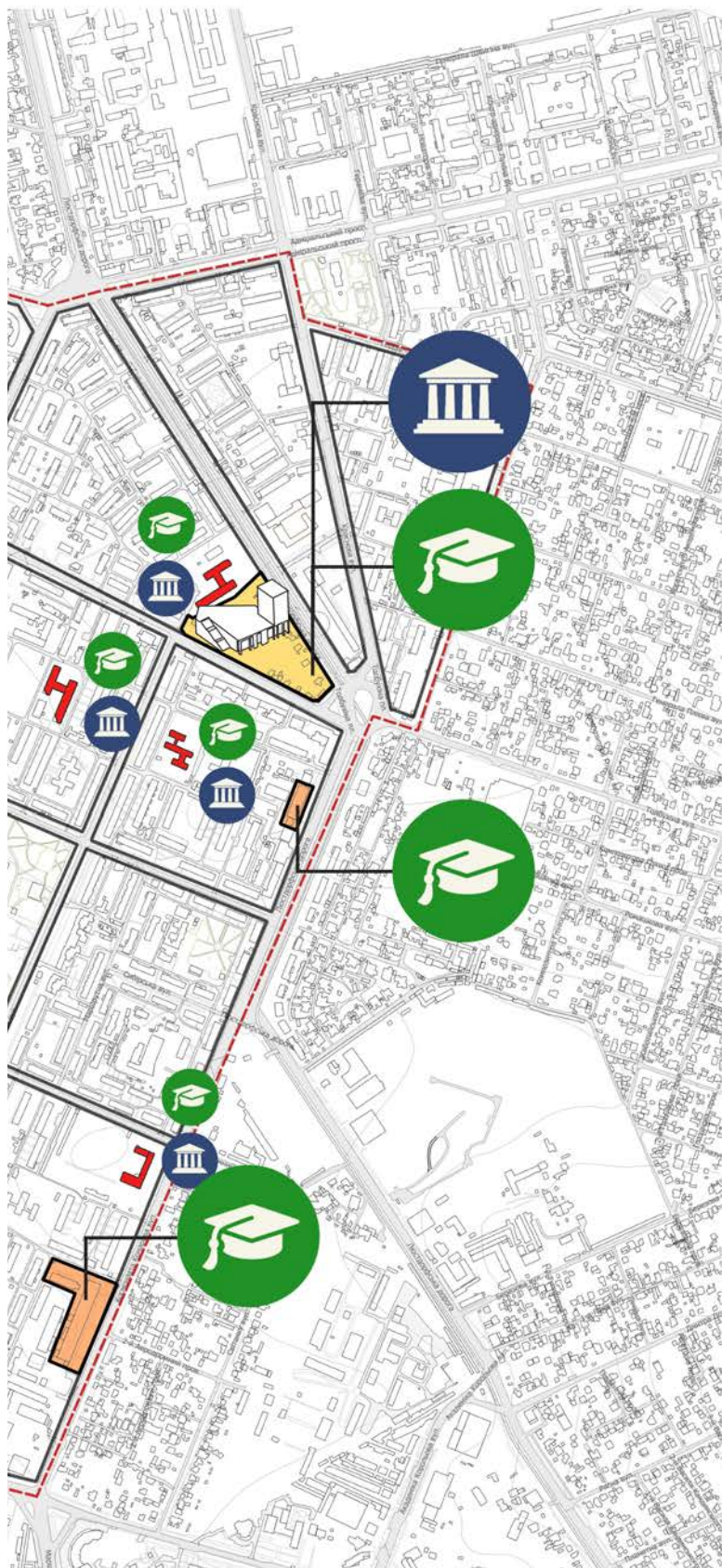




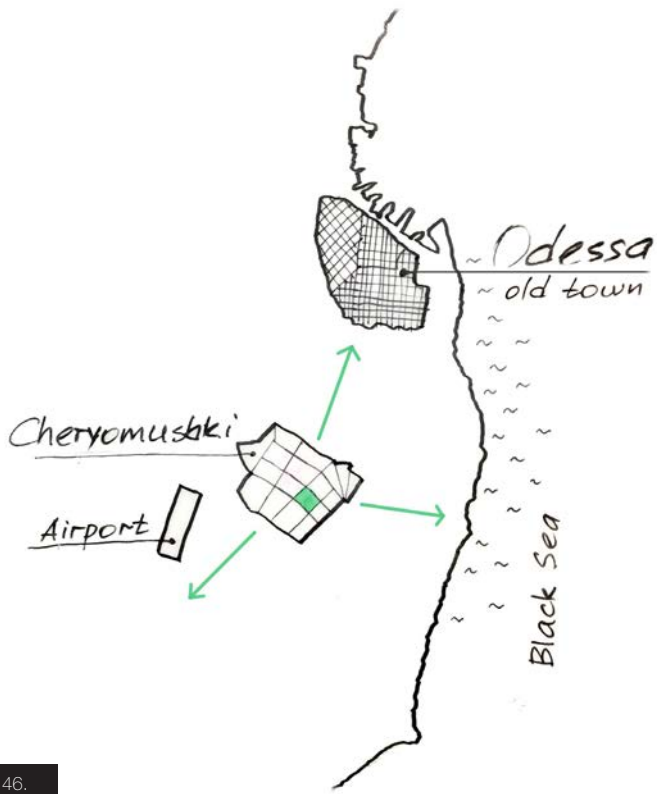




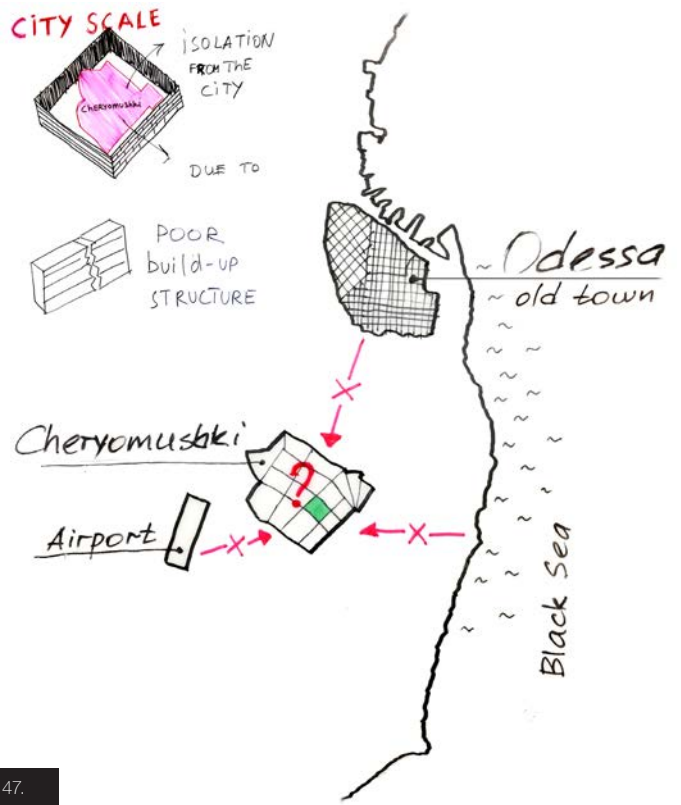
DISTRICT SCALE | МАСШТАБ РАЙОНА



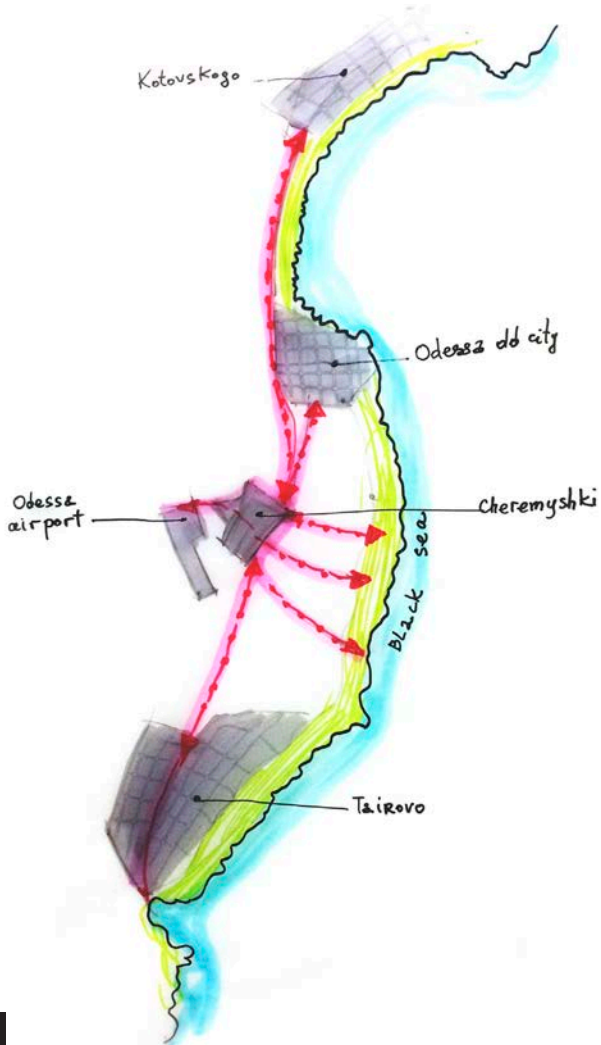
- Location of functions in leased buildings
Размещение функций в арендуемых зданиях
- Construction of specialized buildings
Строительство специализированных зданий
- School territories
Пришкольные территории



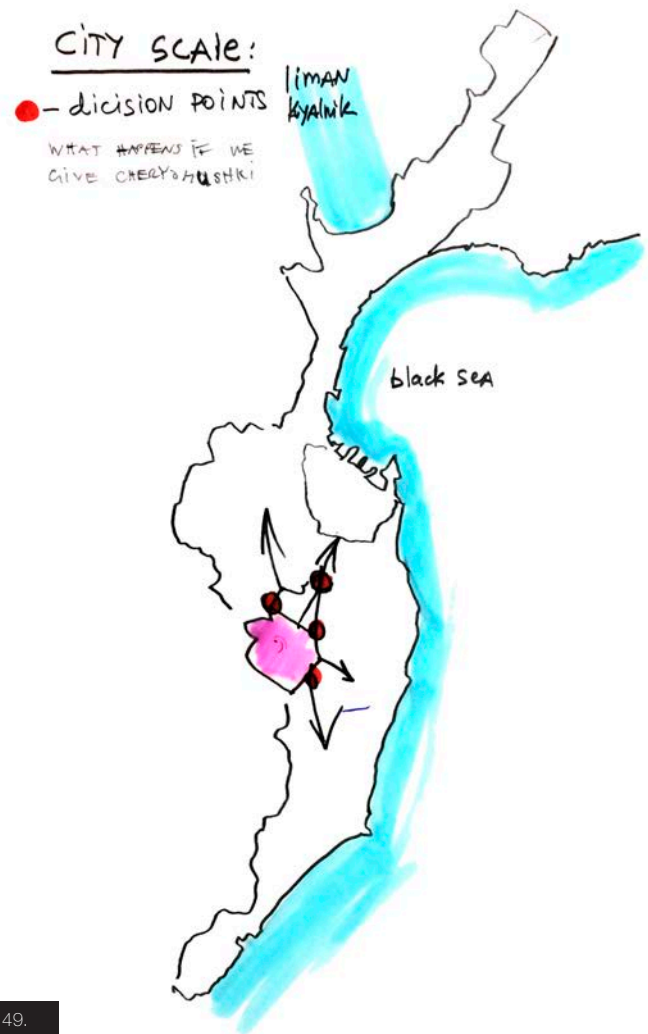
46.



47.



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49.

Analysis and Goals

City

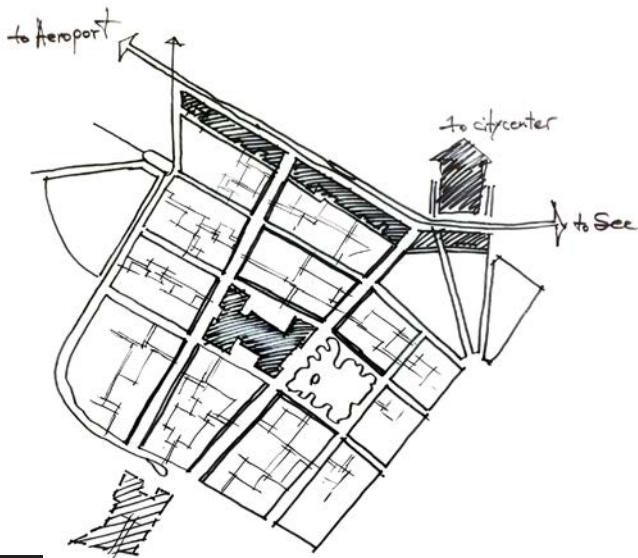
Cheryomushki is located 5km south-west from the historic center of Odessa. It covers an area of about 4,6 km². The district borders the airport in the west and is only 2,5 km away from the Black Sea to the east. The district was built quickly between 1960 and 1975 and has clear borders with the adjacent neighborhoods which consist of either one family houses or simply retail areas and garages. The district has a relatively homogenous built-up structure mostly consisting of 5-storey-high dwellings (Krushevkas), leading not only to a clear identity, but also a relatively boring environment. Besides the Krushevkas there are also 9 storey dwellings, a few towers up to 16 stories each and some buildings for other usages.

One of the biggest assets to the district is its high density of 23.000 p/km². Generally speaking, it is a residential area of about 2 million m² of apartments (18 m² / person).

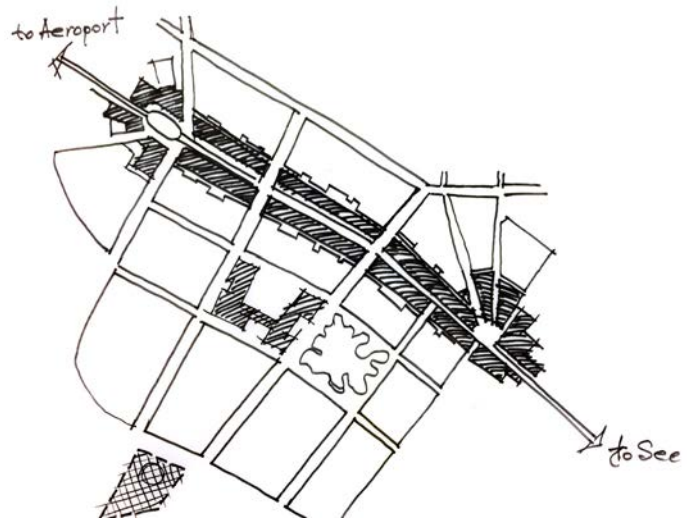
Although the district has a high density It still has a potential for further spatial densification as there is quite a lot of open space. Due to the size of district and its diversity in functions it could be developed into a self-sufficient city.

To improve the quality of life within Cheryomushki there should be

- 38 Scheme showing the balanced functional development of the microdistrict
- 39 Scheme showing the approach towards the development of the cultural and educational functions
- 40 Sketch showing the land-use scenario of condominiums
- 41 Sketch showing the land-use scenario of municipality
- 42 Sketch showing the land-use scenario of mass privatization
- 43 Scheme showing the periods of use of the schools' territories
- 44 Scheme showing the periods of use of the schools' territories
- 45 Scheme showing the approach towards the development of the cultural and educational functions
- 46 Scheme showing the connection of Cheryomushki to the entire city by taking advantage of the strategic sites and preserving the district's identity
- 47 Scheme showing the problem of isolation of the district due to its poor build up structure and lack of attractive sites
- 48 Scheme showing the
- 49 Scheme showing the



50.



51.



52.

larger variety of flats and, moreover, the residential fund should be diversified to provide attractive housing for different income groups. The existing houses have to be renovated since most of them are in rather bad condition. Because of this and the negative perception of large housing estates the district has a bad reputation.

In a transformation process the human scale, identity and unity within the city could be lost, but worst of all, the district is under the risk of becoming isolated from the rest of the city.

While preserving its own identity the district should provide a variety of different buildings which, in turn, can enable different functions to attract both the city residents and its visitors. The beneficial position near the airport should also be taken into account and fully utilized.

Scenarios and Strategies

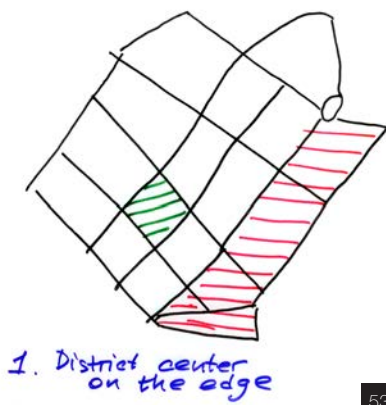
On the city scale a variety of possibilities need to be discussed. Following the “city within a city” principle the borders have to be maintained and no adjacent development should be permitted. Although, it is a clear goal to preserve the integrity of the district, most scenarios integrate the district further into the urban fabric. This integration is what we want to achieve. It should follow the existing and newly formed axes by the means of a densified development.

District

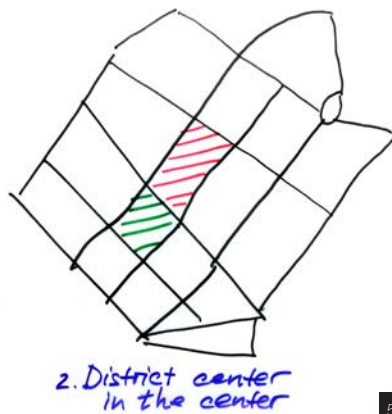
Four very wide boulevards and four equally big avenues divide the district into 18 quarters (micro districts) 20-60ha each. Quarters located in the center of the district host mostly public and commercial functions with a bigger variety of building typologies (e.g. markets, different small factories and offices and a large park, which basically is a green core of the district.

The Boulevards, which lie north and south, are 60-80 m wide and usually have 2 lanes per each direction and a broad zone of greenery, pedestrian and bicycle lanes on both sides of the road. Linear and sometimes even monotonous impression of these boulevards is reinforced by the 5-storey houses running along the street.

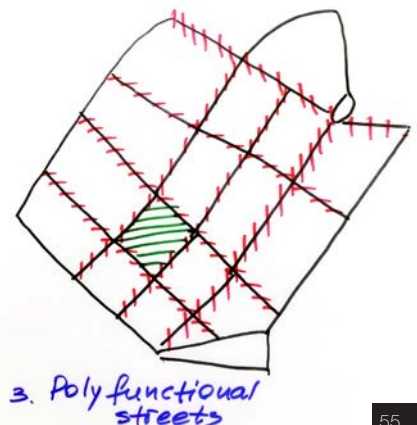
- 50 Scheme showing the strategy of consolidation of the airport-see connection #1
- 51 Scheme showing the strategy of consolidation of the airport-see connection #2
- 52 Scheme of basic strategies of the district development in the city scale



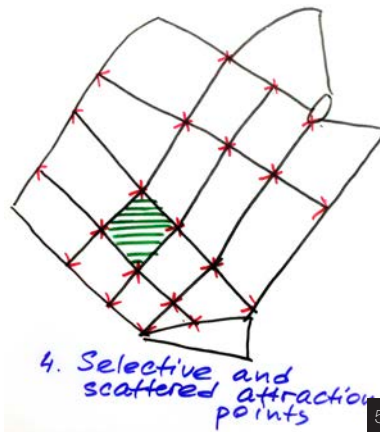
53.



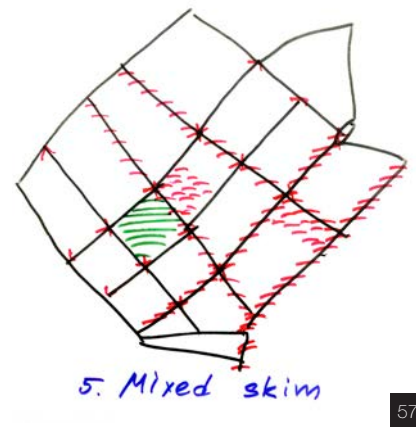
54.



55.



56.



57.

The avenues, which lie east and west, have a similar framework of greenery and infrastructure. However, the buildings located are more various in terms of their orientation and height. On the one hand, it may lead to an unclear spatial configuration, but on other hand, it provides streets with a certain rhythm. There is also a wide variety of small kiosks which interrupt the fluidity and pedestrian accessibility, thus creating an impression of a completely unorganized structure. This disorder is well represented at the intersections of boulevards and avenues, where it is not only uncomfortable but also unsafe.

After 1990 the district has been losing its unity and character because no holistic planning effort was made since then. Without such holistic approach, it is unlikely that the unified appearance of the district can be maintained and thus the district might lose its integrity.

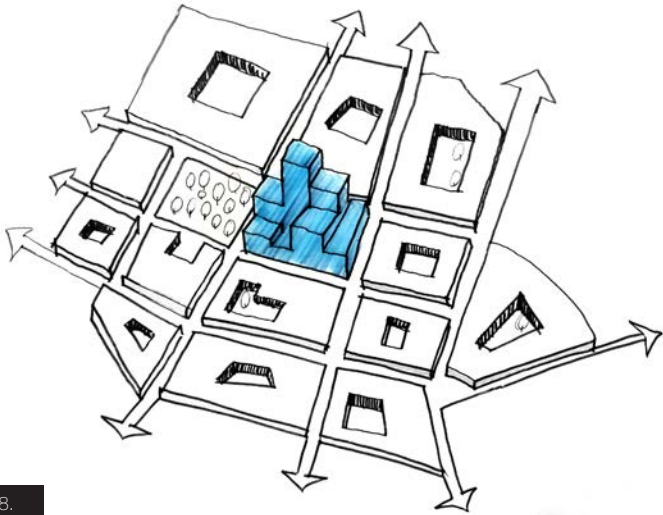
To conclude, we want to provide the district with an impetus for further development by enabling environment for both large and small investments. Moreover, we want to preserve and strengthened boulevards and avenues, improve the orientation and identification of different neighborhoods and to organize a better distribution of functions.

Scenarios and Strategies

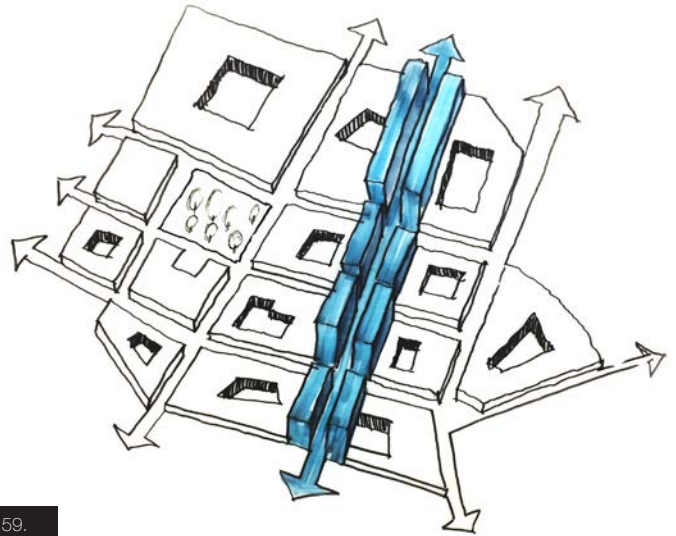
The need for further densification and construction could be met though the redevelopment of the entire quarters which, in turn, would lead to the lack of balance within the district.

A linear development along the boulevards and avenues could make them more attractive for the tenants and take advantage of the existing public transport system.

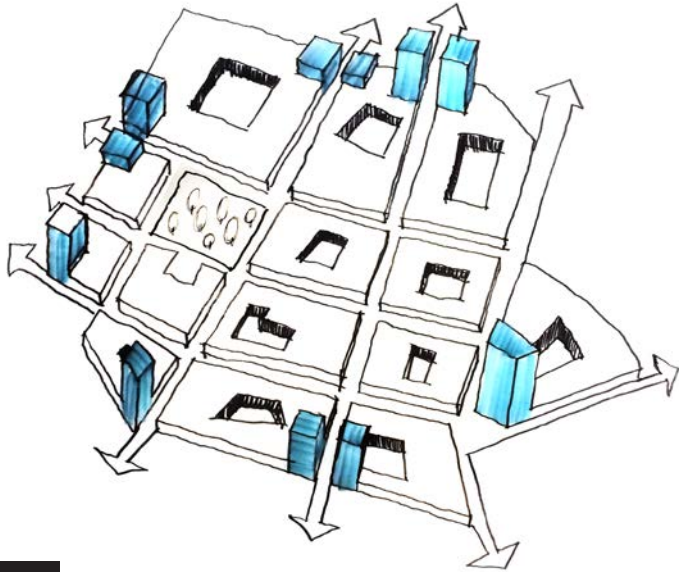
- 53 Scheme showing
- 54 Scheme showing
- 55 Scheme showing
- 56 Scheme showing
- 57 Scheme showing



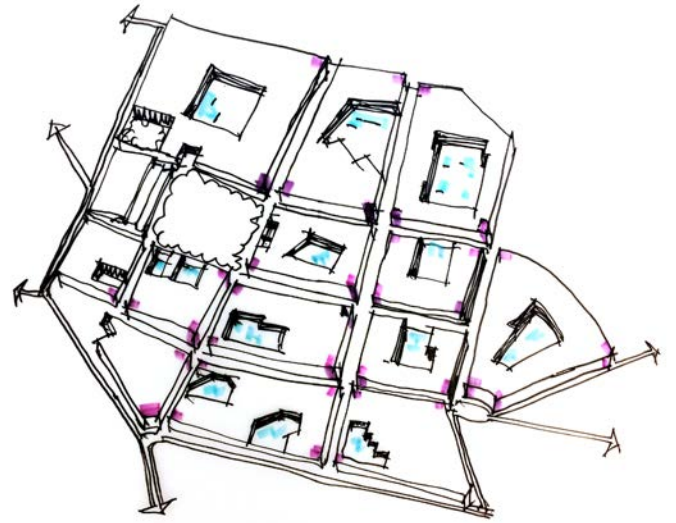
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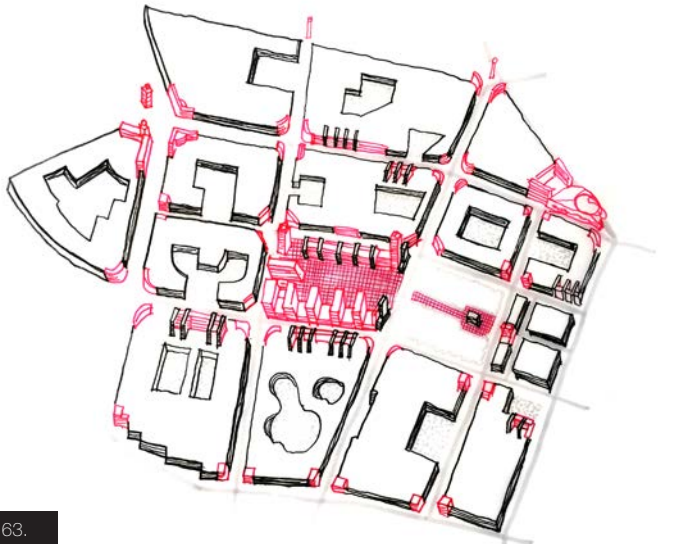
60.



61.



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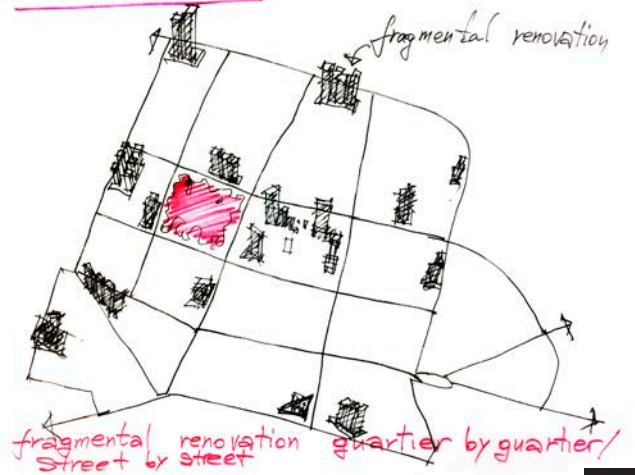
Can it be written like this?
58-63 Sketch of the district's development

- 58 Sketch of the district's development
- 59 Sketch of the district's development
- 60 Sketch of the district's development
- 61 Sketch of the district's development
- 62 Sketch of the district's development
- 63 Sketch of the district's development

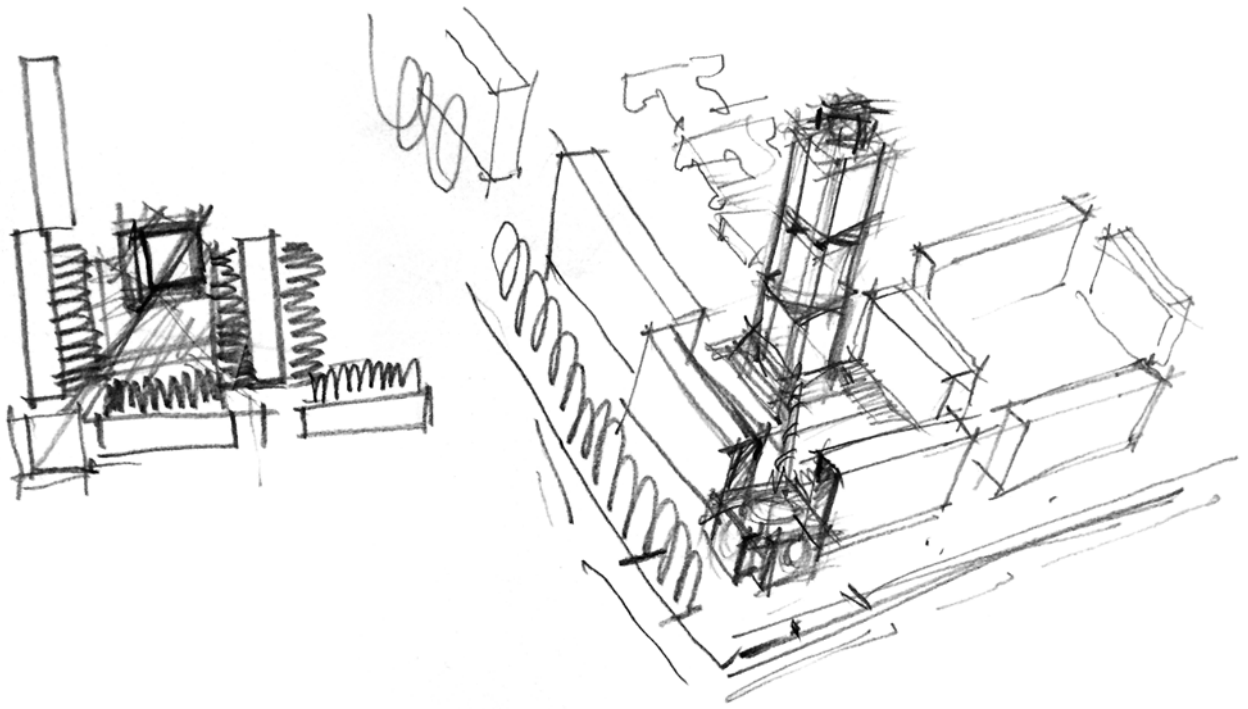


64.

District scale



65.



66.

Due to the high demand for dwellings and other types of buildings they might get overloaded.

By closing the corners of the district with high-rises only a relatively small amount of new built up structures can be implemented, and in case if the towers get too high the scale of the district can be lost. However, these high-rises located at the corners of the district could provide identity for both quarters and the district itself and enable a wide spread of functions.

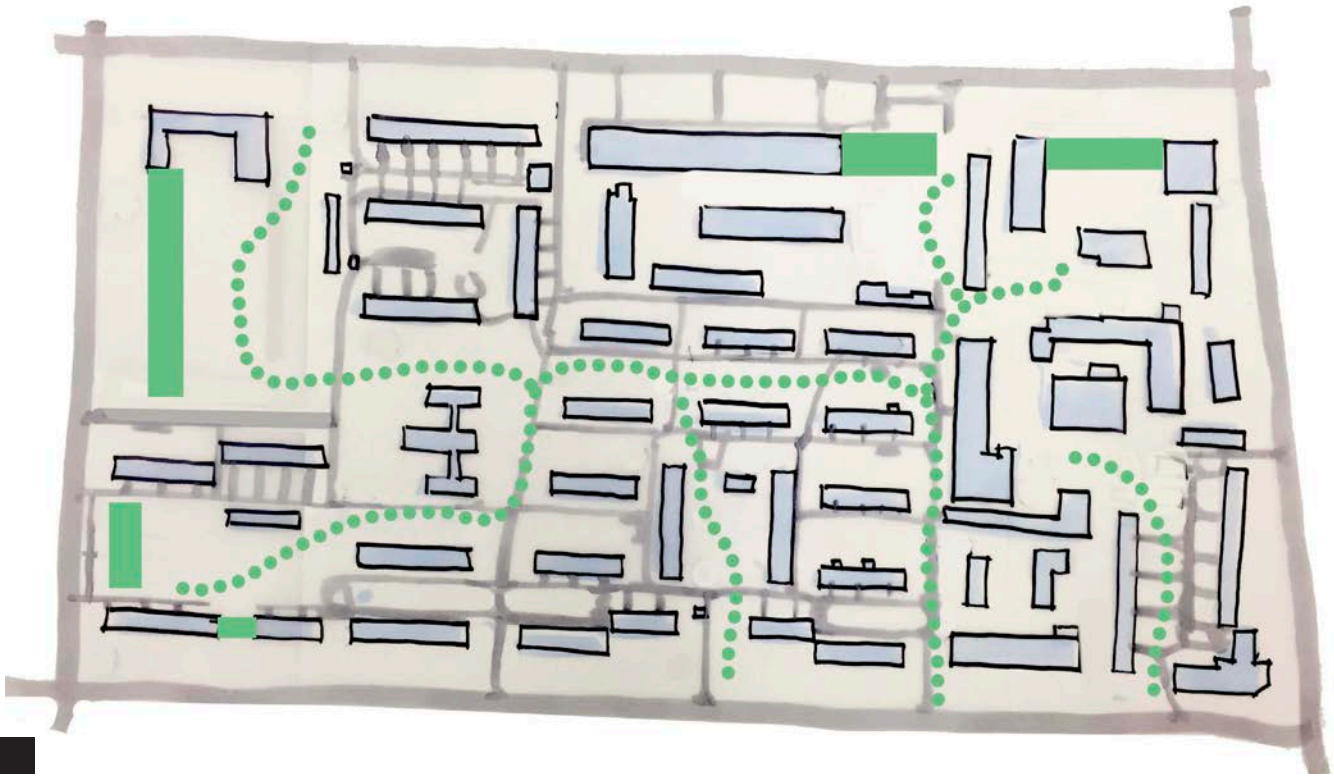
Concept

To achieve a well-balanced development of the district while providing space for a larger variety of typologies, both for dwellings and for other functions we propose a transformation on different levels. First of all, the commercial center should be redeveloped. Some buildings such as market hall and landmarks within the factories should be preserved,

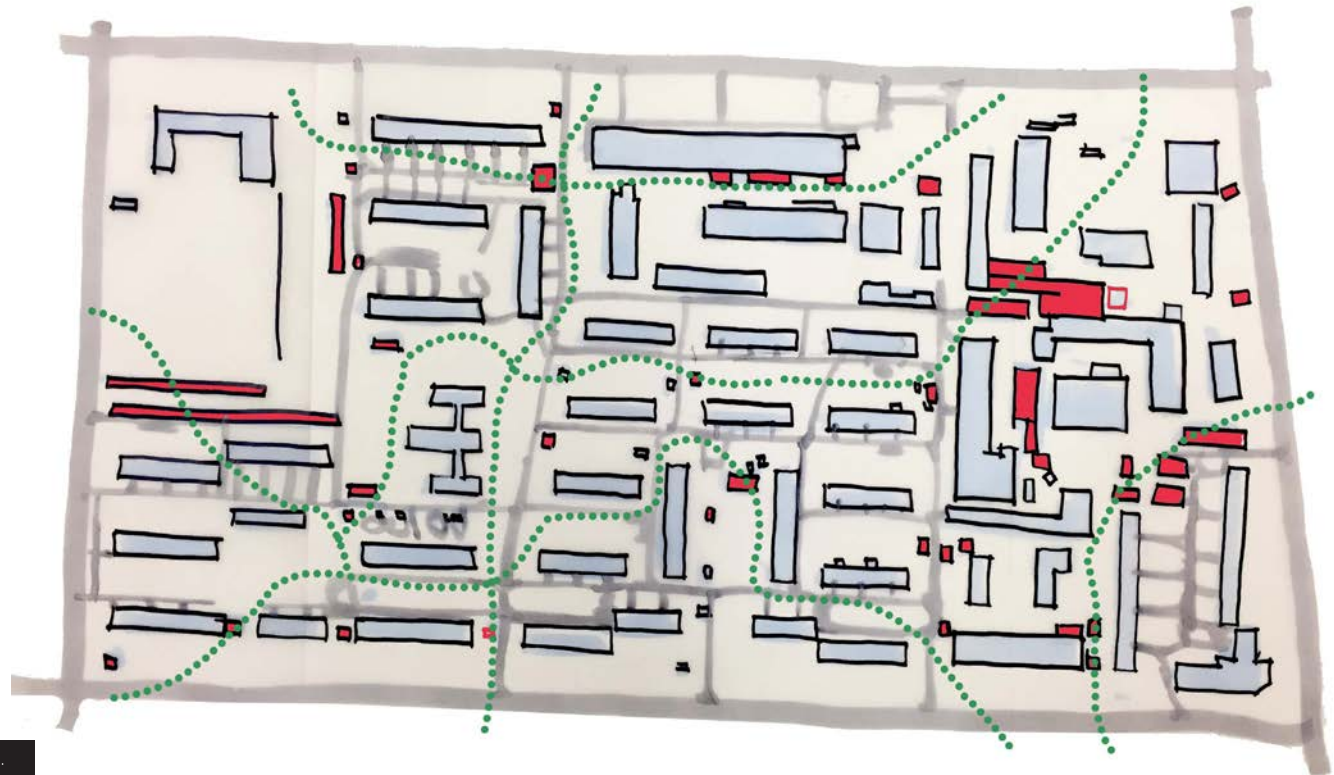
64 Scheme showing the potential of using the uniform structure of the entire district and the opportunity of preservation of the soviet heritage

65 Scheme showing the

66 Sketch showing the idea of accentuating the edges of the quarters



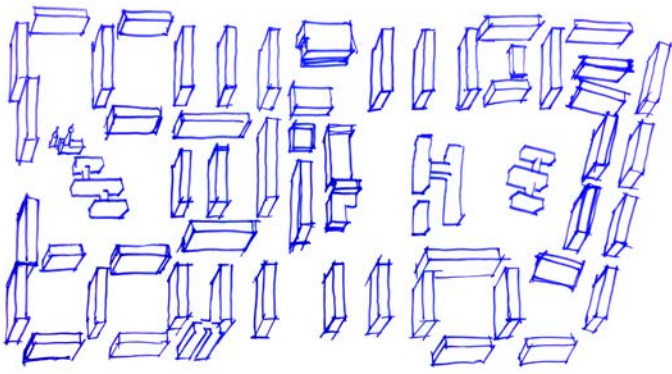
67.



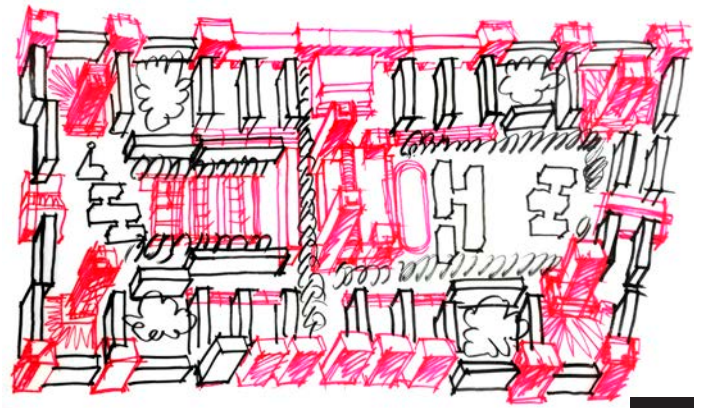
68.

67 Scheme showing the goal of densifying and clarifying the urban layout and preserving the idea of space fluidity

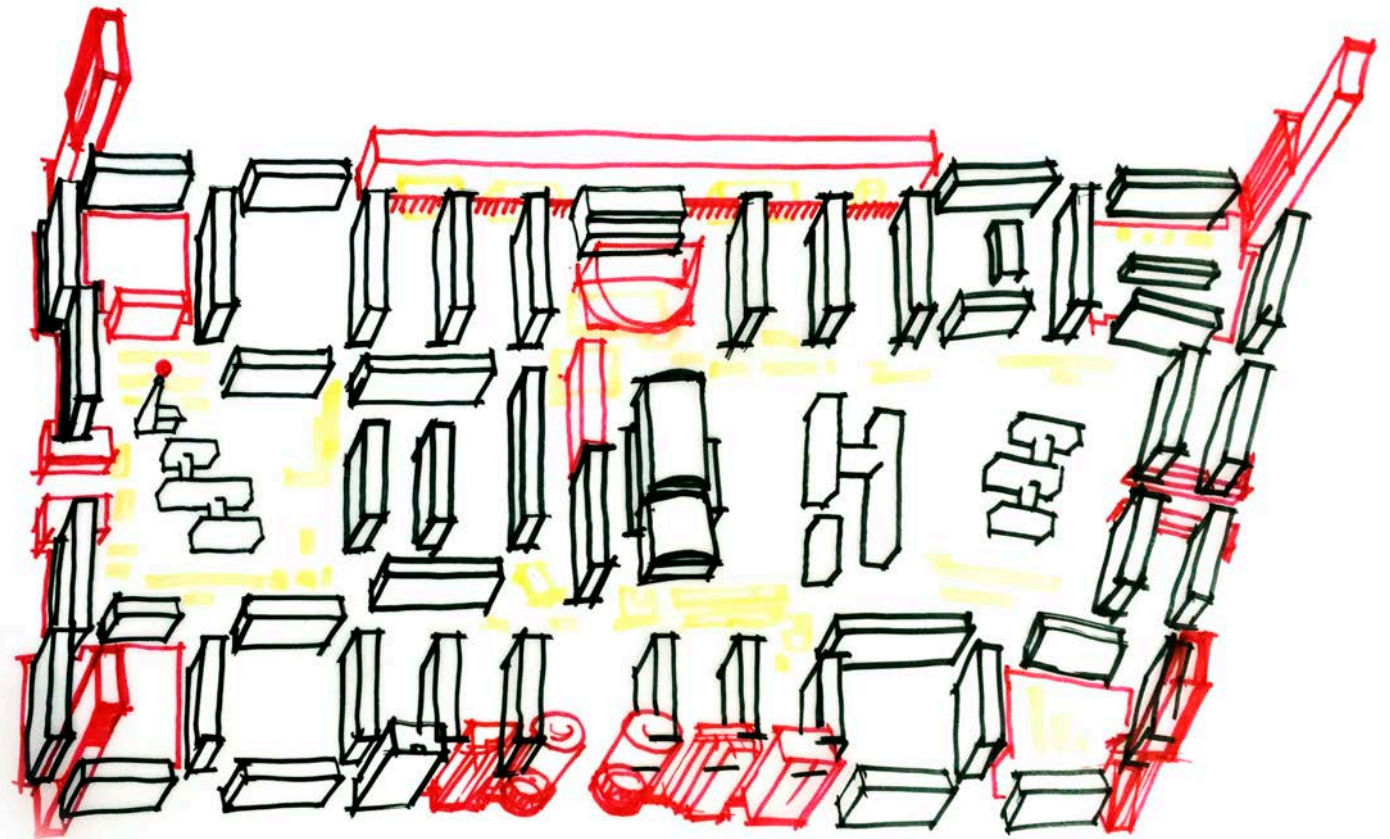
68 Scheme showing the potential preserving the fluid urban layout



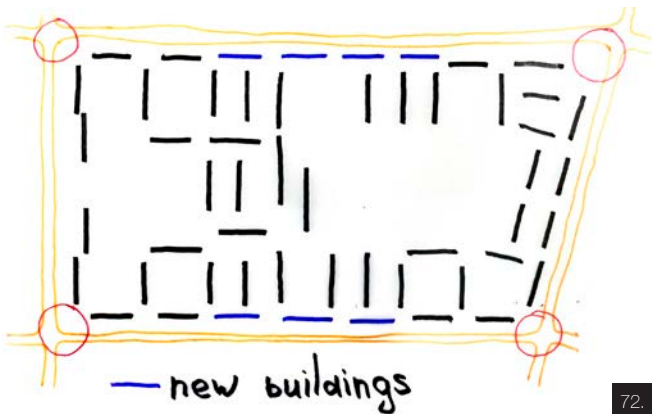
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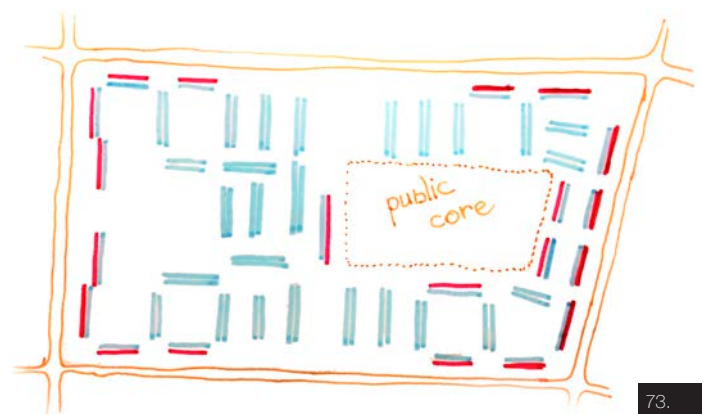
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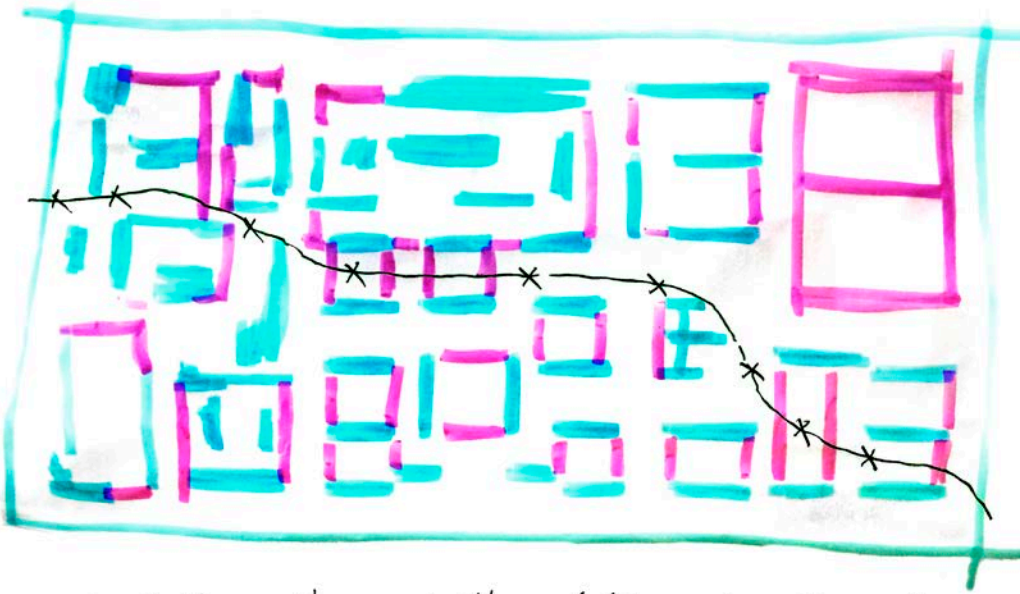


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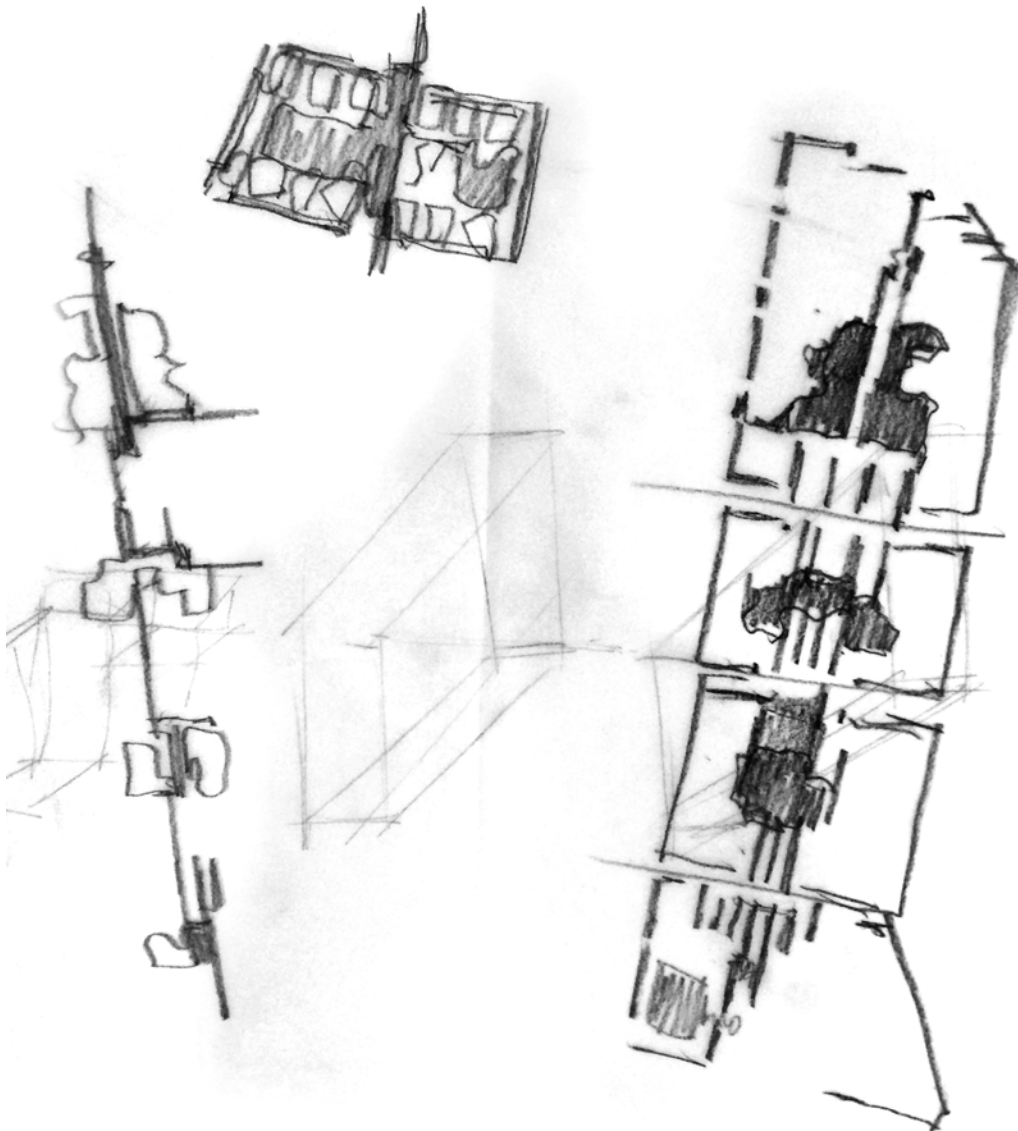
73.

- 69 Scheme showing current condition of the microdistrict
- 70 Concept of the microdistrict #1
- 71 Concept of the microdistrict #2
- 72 Scheme showing the strategy of preserving and enhancing the closed appearance of the quarter with the extenuation of corners
- 73 Scheme showing the strategy of preserving the existing facades or change to the former appearance

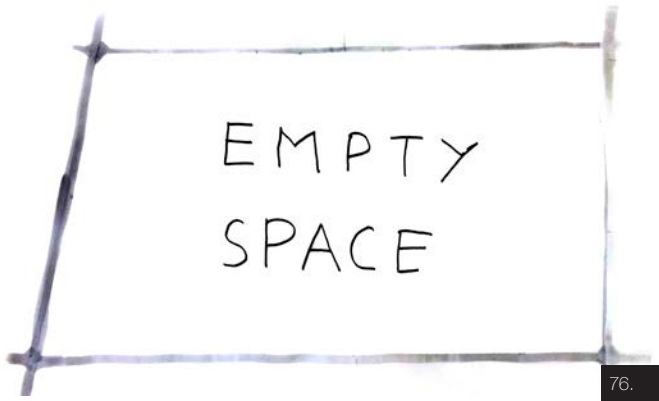


Lost of the unity and the relations of public and open cores, clearly defined peripheries and the fluidity within.

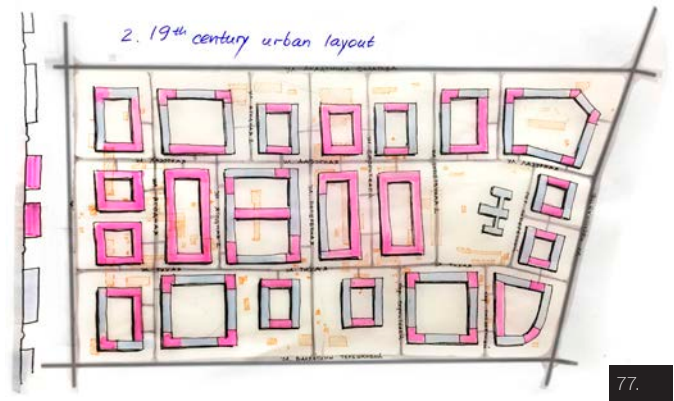
74.



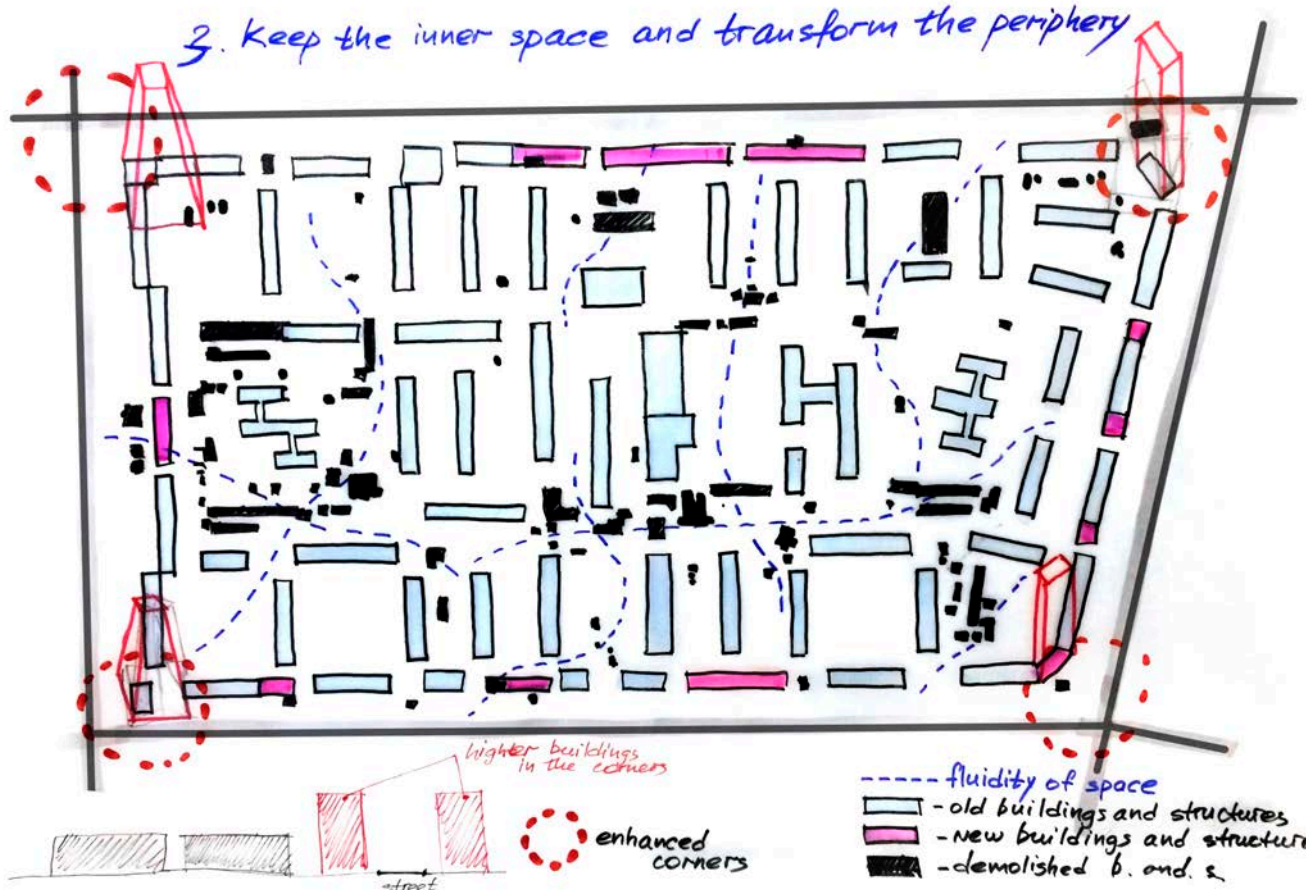
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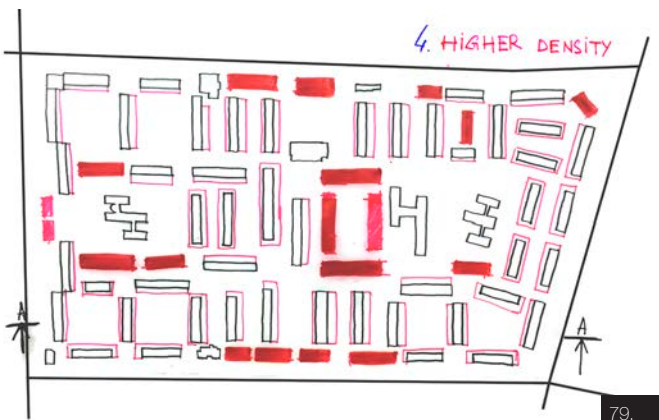
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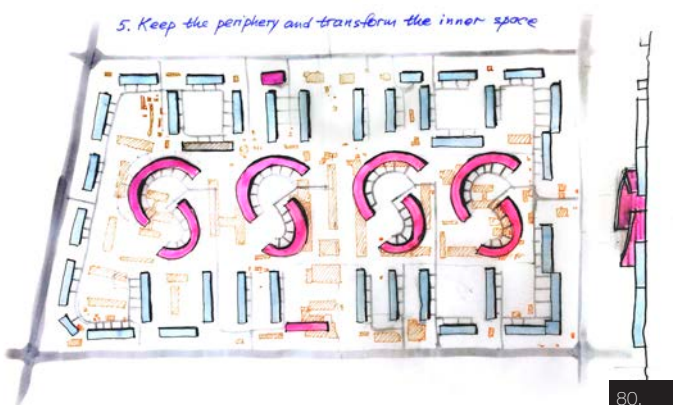
77.



78.



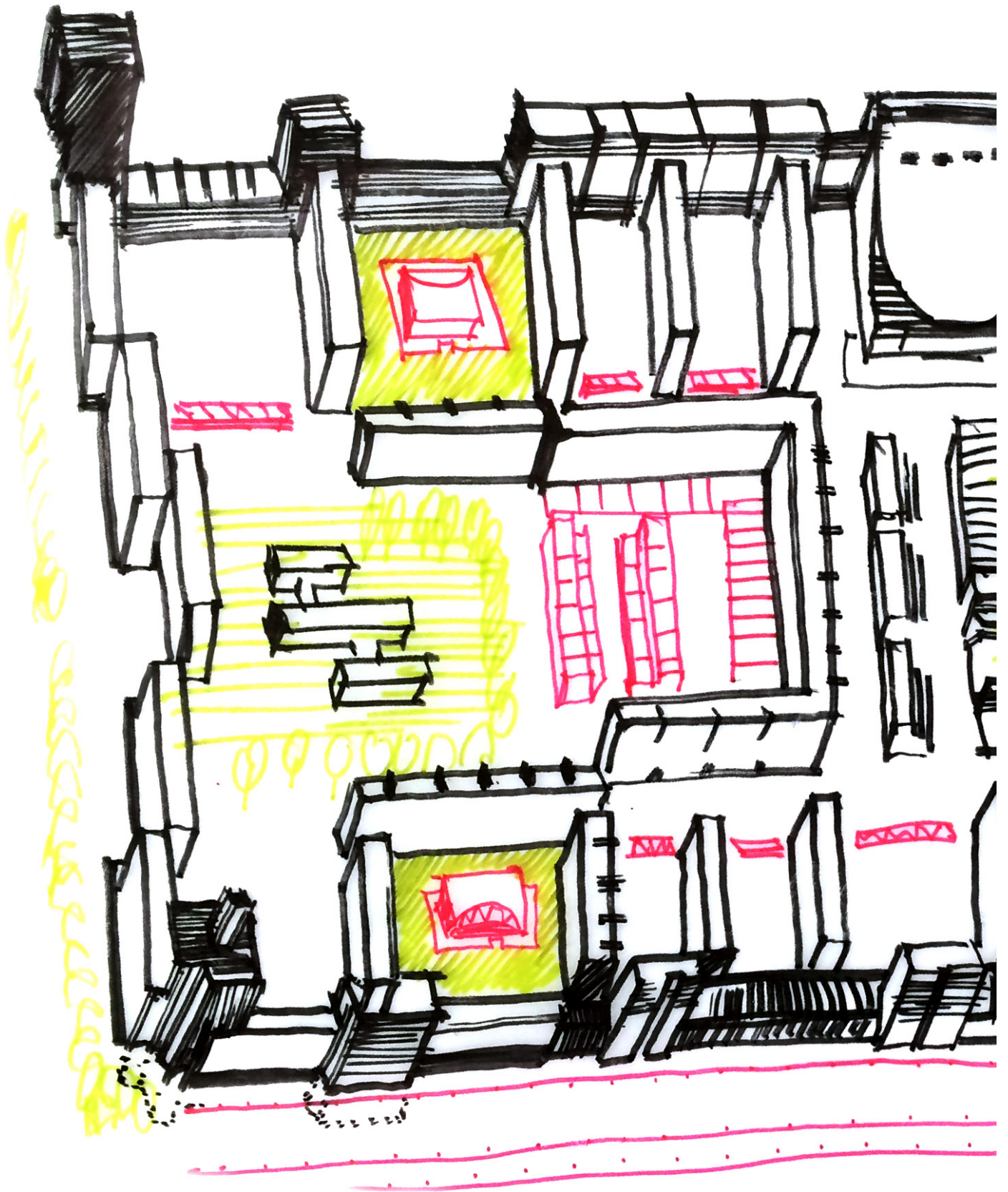
79.

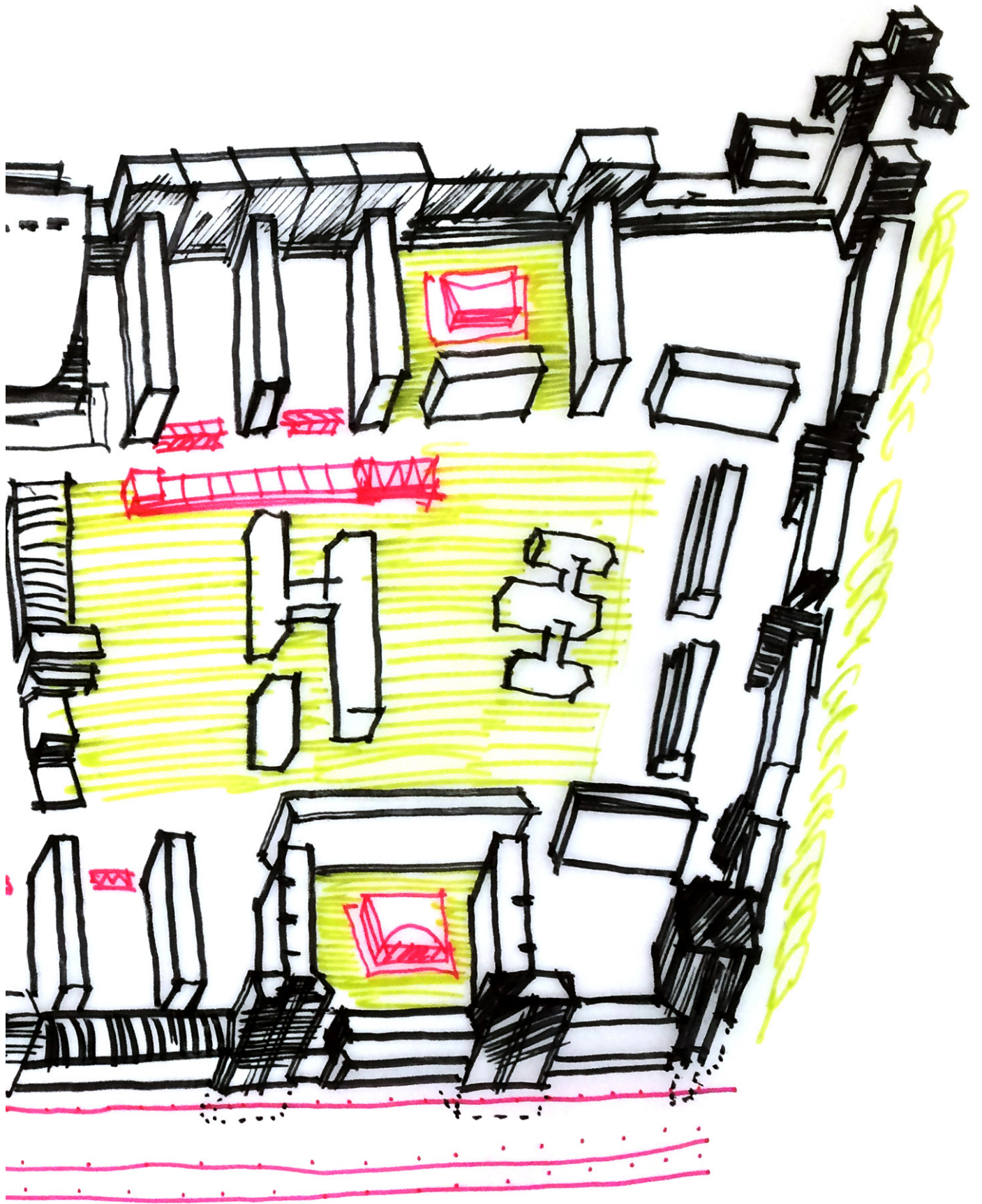


80.



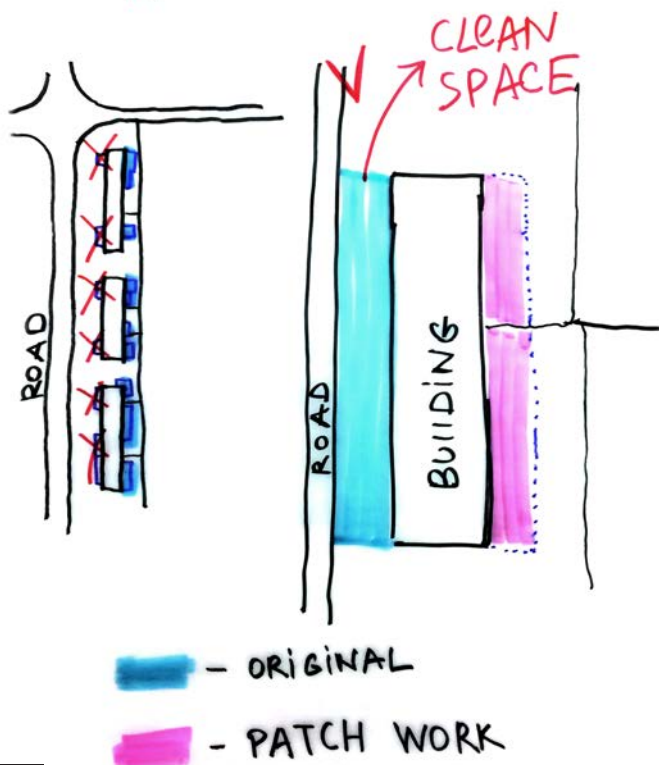
81.





1. PRINCIPLE

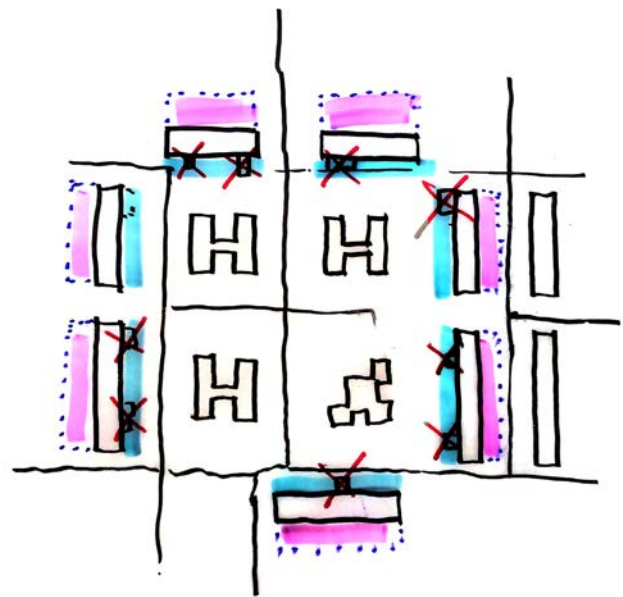
"border microdistricts"



83.

2. PRINCIPLE

PUBLIC SPACE INSIDE MICRODISTRICT



84.

the rest can be transformed into a CBD / CCD. In strategic terms, a high development should occur in the periphery of Cheryomushki in order to establish an entry point to the district. Areas near the intersections should be finished by the high-rise buildings which purpose is to reinforce the district's identity and to enhance orientation within it.

Quarter (microdistrict)

The quarter is the most important unit in Cheryomushki. Each quarter houses, on average, 8.000 inhabitants. However, there is a lack in the typology of the buildings. A significant amount of unauthorized built up structures such as sheds and garages can be found between the buildings, in yards, next to the streets, etc. Due to the buildings' orientation along the boulevards quarters have quite clear borders at the sides but they are rather unclear along the avenues. The houses inside the quarter do not stand in closed blocks or in a clear row. Sometimes they are parallel to the inner streets, sometimes they are perpendicular. Even the aligned houses vary in their length and the spacing of buildings is sometimes half of their width. Although this layout enables a fluent movement through the entire quarter, it also complicates spatial orientation within it. While walking through the urban fabric of the district new unexpected spatial configurations appear quite often, and thus there is still only a minor difference between the street and the yard. There is no clear differentiation between public and private spaces, as well as between the area in front of the building and behind it. On the one hand, fences, stones, old tires and small walls made by locals can be considered as a certain zoning of the area, but on the other hand, these locals' initiatives can lead to even less structured and organized land-use, as the spac-

74 Scheme showing threats to loose the quality of the original urban layout

75 Sketch showing the idea of fluidity in the microdistrict

76 Scheme showing the first way of the microdistrict's development as a building-free territory

77 Scheme showing the second way of the microdistrict's development according to the structure of the historical part of Odessa

78 Scheme showing the third way of the microdistrict's development by enhancing the periphery of the quarters.

79 Scheme showing the third way of the microdistrict's development by increasing the density

80 Scheme showing the third way of the microdistrict's development by enhancing the inner space of the quarter

81 Section A-A to the scheme #79

82 Scheme showing the results of the steps taken to enhance the microdistrict

83 Principle #1 Border of the microdistrict

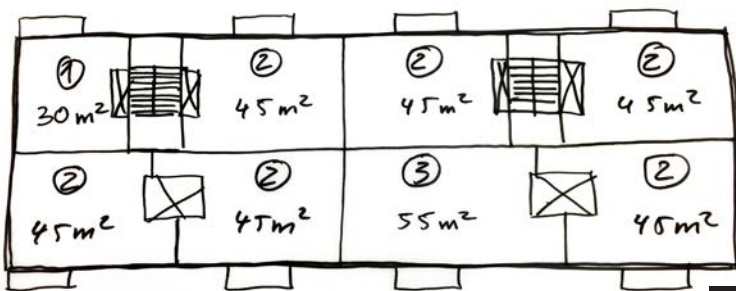
84 Principle #2 Public space inside the microdistrict

ing between these fences and garages is not used at all. The core of each quarter has an open layout with only a few public buildings such as kindergartens and schools being situated in a park-like areas.

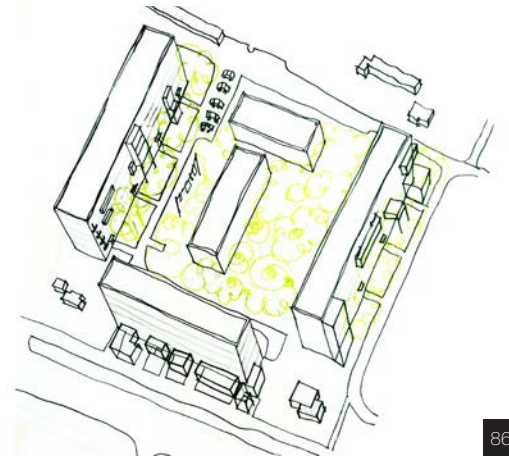
The quarters show a potential for further densification, especially near the corners. The open space in the center should stay unoccupied to preserve the special character it currently has. Today the quarters have a rather closed structure and thus have a strong unity.

The goal is to organize both planned and unplanned build-up structures, while preserving the idea of a public core in the center, fluidity through the entire quarter and a residential zone on the periphery that would minimize unsafe and undefined spaces within

SMALL FLATS
SIMILAR LAYOUT
NO STORAGE

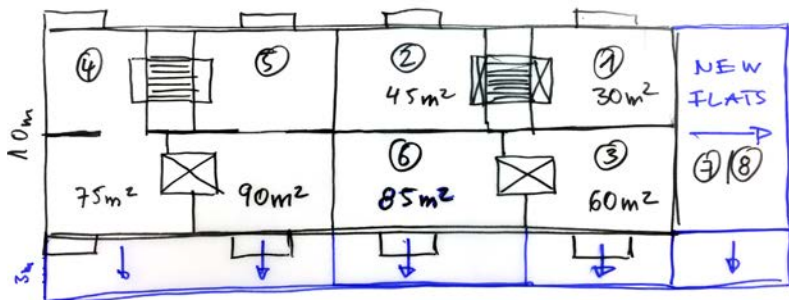


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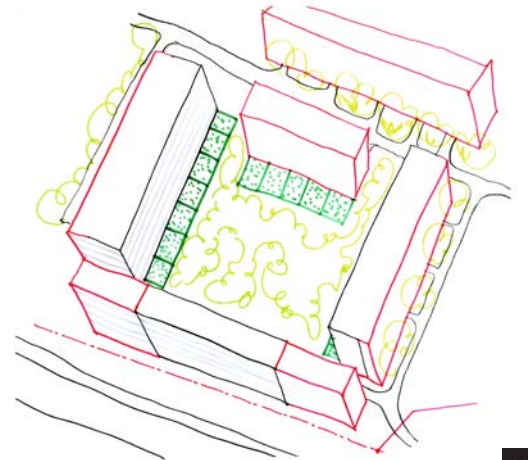


86.

COMBINE FLATS
DIVERSE LAYOUT
ENLARGE FLATS / BUILDING



87.



88.

the microdistrict and lead to a better orientation in the quarter.

Scenarios and Concepts

The most likely scenario is at the same time the least promising concerning the heritage of the district, the quality of life and the environment as a whole. Nevertheless, according to what we see in Russia, the entire districts are being demolished to free the territory in the central locations for more profitable investments.

Therefore, districts lose their spatial fluidity and the variety of configuration of space. The higher densification of quarters can lead to the loss of their identity. The fluidity of space requires space, otherwise the current quality will be lost.

- 85 Existing small sizes of the flats within the block, Team of Built Up Structure, 2017
- 86 Existing yards and their denarcation, Team of Built Up Structure, 2017
- 87 Diversification of the typology of flats according to the modern demands, Team of Built Up Structure, 2017
- 88 Concept in the block scale, Team of Built Up Structure, 2017

After the demolition of all the existing unauthorized structures such as garages and sheds the original layout would reappear, though the need for more housing and the unclear urban fabric would still exist. That is why it is essential to find a solution concerning the required storage space and parking areas.

We suggest to organize the densification of quarters and to clarify the build-up structure. This would solve a number of problems local urban fabric has. These are:

- The open corners along the avenues where buildings stand perpendicular to the street and thus open the semi-public space to a major traffic.
- The open corners of quarters with a lack of structure.
- The undefined spaces within the district especially around the dwellings.
- The lack of flats and commercial buildings.
- A better orientation on the microdistrict level.

On the one hand, we want to achieve this by constructing new buildings. We want to close the open edges of the quarters along the avenues, maintain the linear structure and preserve enough space for ventilation. In the residential areas we want to define both half closed and semi-public yards by carefully positioning new residential buildings and extending the existing ones to line them up with others. Our plan is to demolish buildings and structures that subvert the idea of a public core and semi-private yards.

Realization

There is a need for a legal background for the densification, since in many cases the existing buildings will be affected.

Block / Yards

Due to the described layout there are no classical blocks, the positioning of the houses, however, provides a human scale. The most common are five-storey buildings which are 15m in height, 10 m in width and 50-75 m in length and have from 3 to 5 entrances. Other less spread dwellings have up to 16 stories, but there are a few of them. Different configurations of blocks can be found as well. The buildings follow the soviet planning code, except minor changes in their structure when more space is required. Therefore, the buildings' orientation is often quite varied.

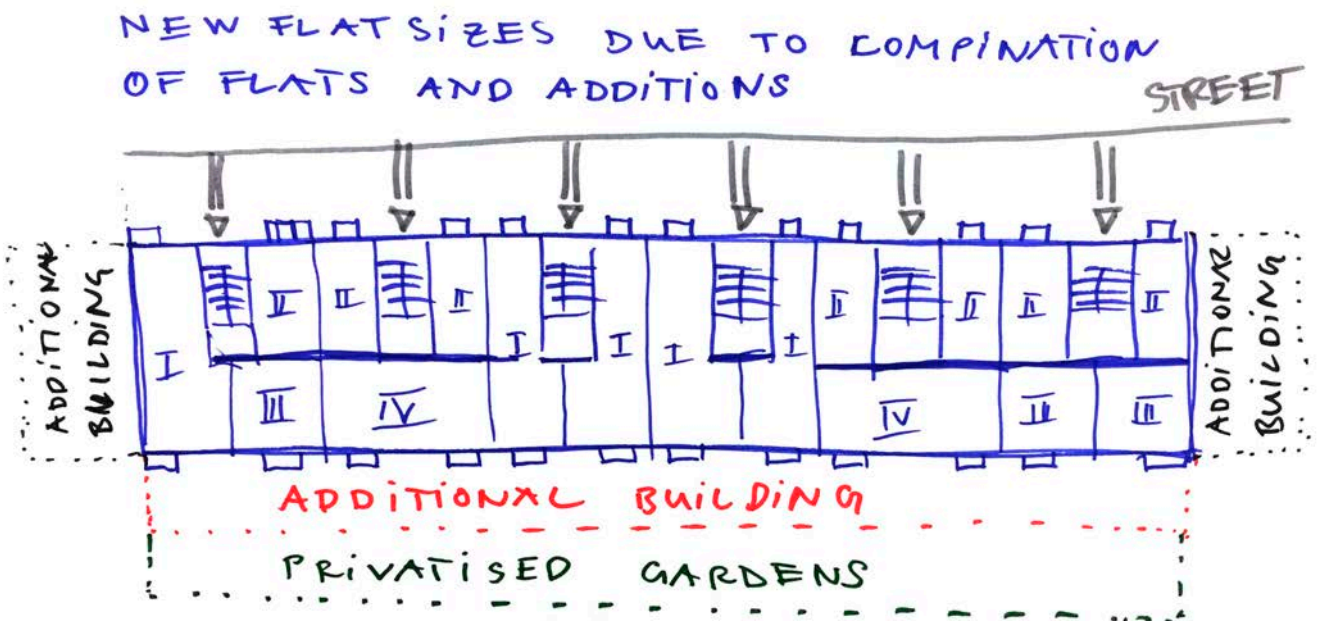
Prognosis

Uncontrolled construction of unauthorized structures would result in a loss of public and semi-public spaces which, in its turn, would eliminate the attractiveness of the yard space.

General Assessment

The original layout of Cheryomushki needs further densification and clarification in all scales.

The original layout shows a lack of function on all scales, as well as the building typologies and opportunities for the diverse de-



ADDITION FOR COMMON USE, STORAGE OF PUBLIC / COMMERCE ON THE FIRST FLOOR

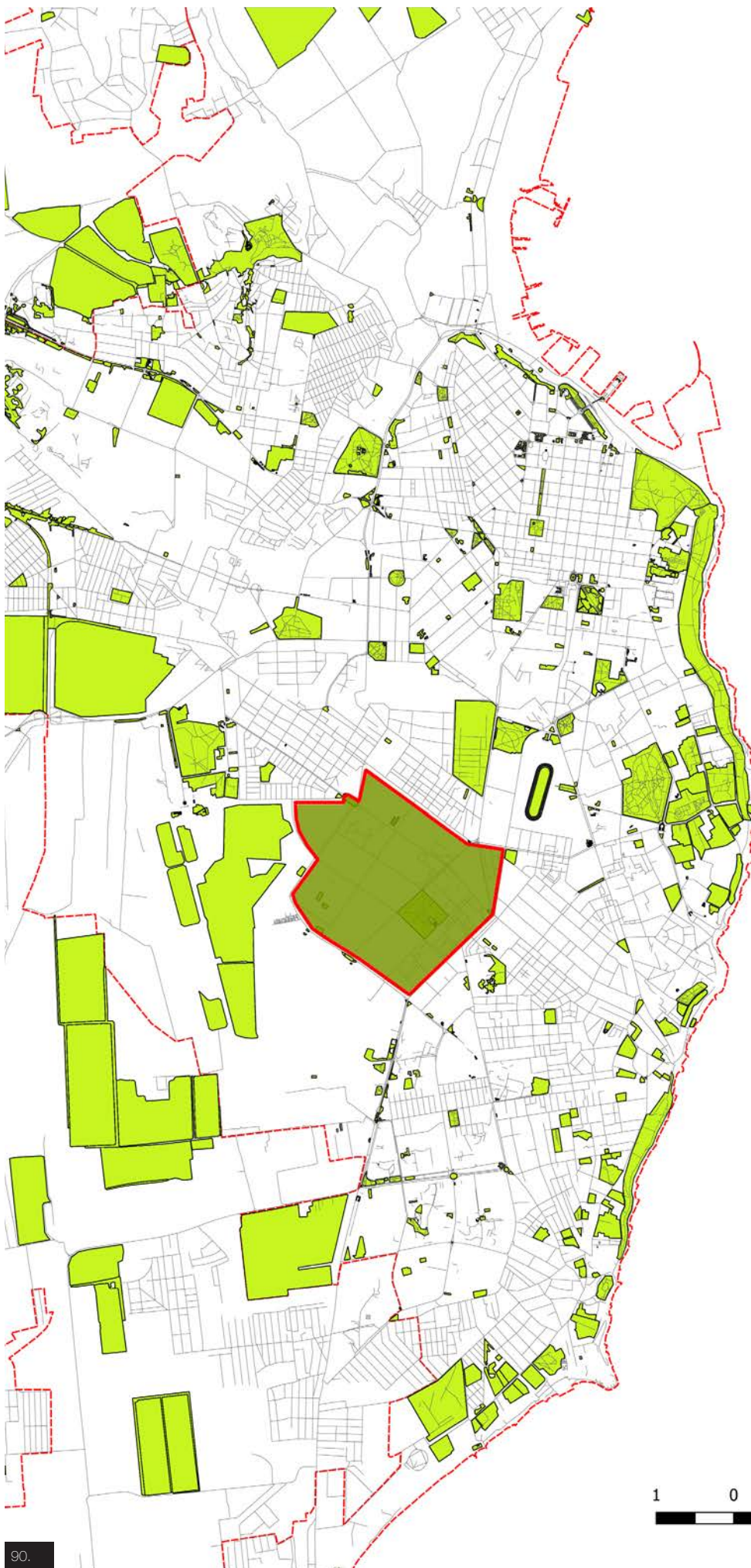
89.



velopment. On the one hand, this is a result of altered requirements and conditions. On the other hand, it occurred due to the mistakes made during the planning and construction. Over the years it has resulted in a rather chaotic transformation of the district. This transformation was possible because of the fluent layout of the modern city combined with a lack of regulation.

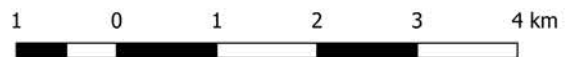
Moreover, this transformation has often led to unclear and unsatisfying results. It has contradicted the original ideas, has not met the occurring needs sufficiently and has even led to the dangerous situations. (e.g. lack of traffic visibility at the crossroads; dark spacing between the garages and unsafe adjacent structures such as balconies).

With our concepts on the different scales we want to find a new balance in further densification, while preserving and strengthening our understanding of the original ideas of Cheryomushki.

89 Scheme showing the goal to diversify the typology of flats according to the modern standards of living (original sketch)



-  city green
-  Cheryomuhski green



Prof. Engel Barbara
Asst Prof. Tanya Rumilets
PhD Malko Anastasia
PhD Cand. Antonenko
Nadiia
Havelia Nataliia
Gorsha Anastasiia
Gabai Maxim

Open Space and Landscape

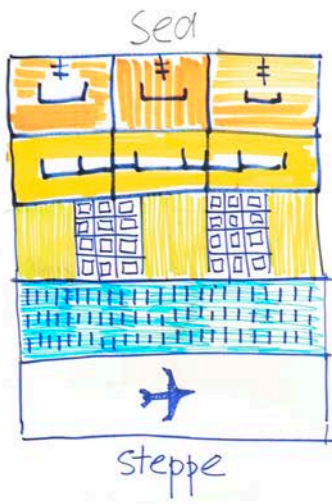
1. Situation and Background. Analysis.

Odessa has always been a tourist destination by the sea with a mild climate and a beautiful coastline. However, it has not much to do with the Cheryomuhski district but nevertheless its territory is one that the city should take care of. This is a question of high importance of how to deal with spaces and greenery outside the attractive seaside throughout the future development of the city.

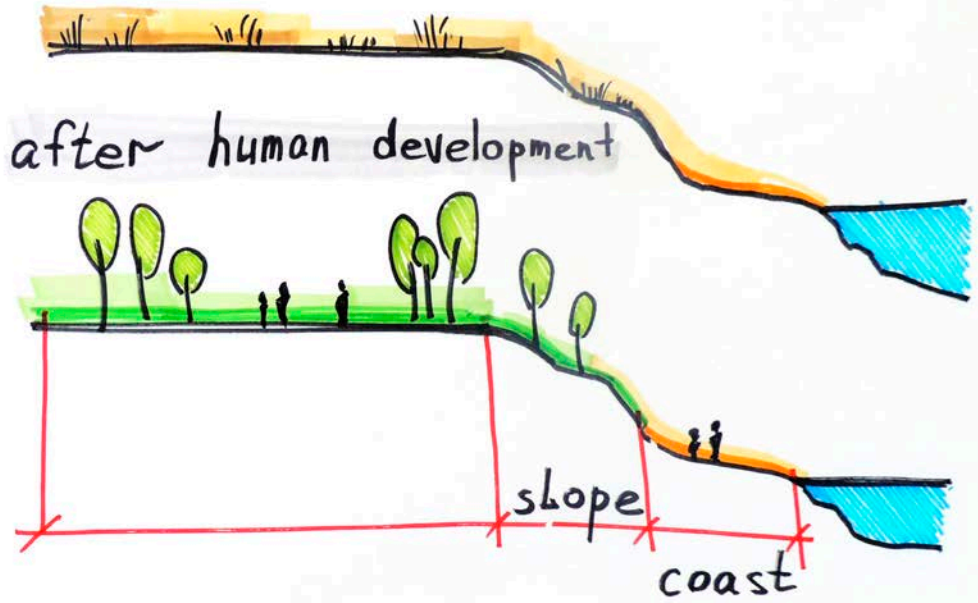
We defined that Cheryomuhski is a very undetermined and unclear place in terms of the open spaces. The district itself is one of the biggest green areas in Odessa, however, it is not perceived as such.

Main open spaces are no longer exclusive for the district's inhabitants due to the increasing commercialization of the open spaces. Nowadays, for example, the Gorki park as the main in the entire district is more like a theme park, which territory is more or less privatized and has a lot of closed spaces. In the meanwhile, the rest of the district struggles with the economic and social issues leading to the increase of pollution and criminalization (perceived or real).

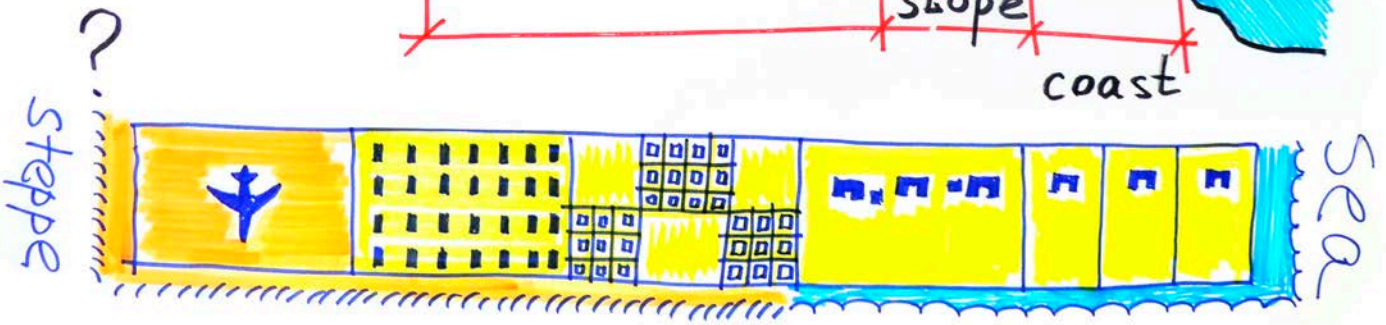
The undetermined and split surfaces also make things worse. The misuse of space and unorganized private use can be seen all over the district and moreover they are condensing the open spaces and destroying the initial concept of fluidity. This is an unfortunate development, because the Cheryomuhski district has a lot of potential. The spacious green



before human development

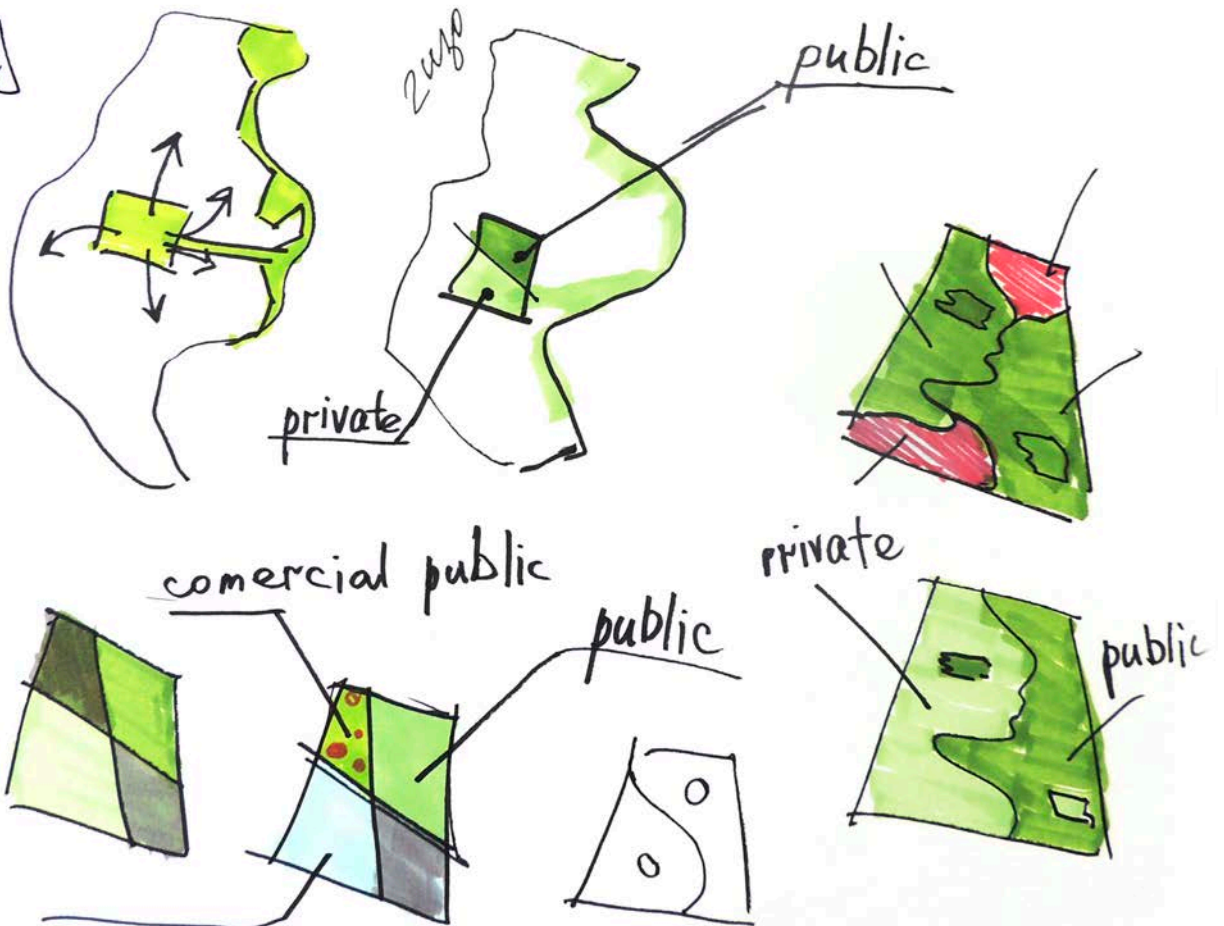


What's next

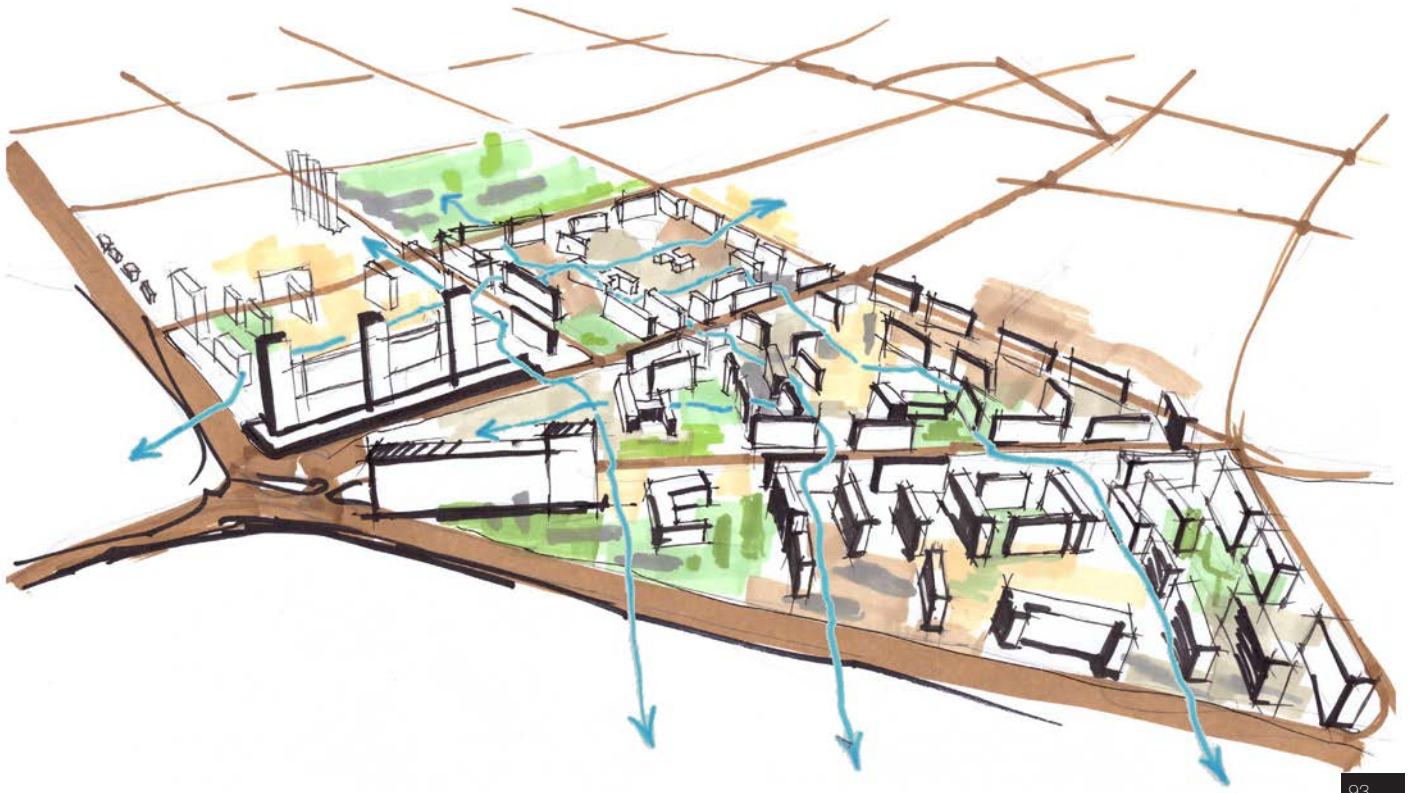


91.

1. City

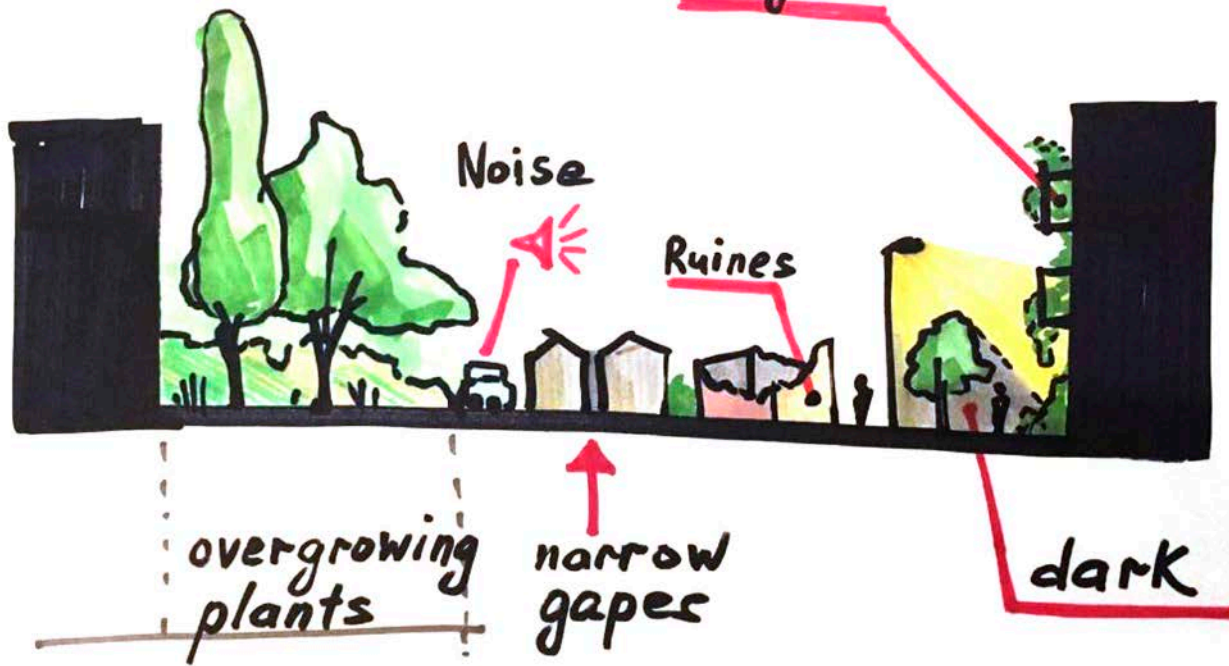


92.



93.

invasion
disappearing
of green



CRIMINALIZATION

UNDEFINITION

SEGREGATION

94.

- 91 Scheme showing the analysis of green spaces in Odessa
- 92 Scheme showing goals in the city scale
- 93 Sketch showing goals within the districts
- 94 Sketch showing aspects which have to be reduced during further development



95.

areas can be used in various ways in case if they are well appointed. The smooth landscape includes the possibility of the procession- al usage developed within the inhabitants. This is an essential aspect often missed in the city centre and other districts in Odessa.

Another thing is the lack of understanding of the ownership issues. Whether it is the issue of zoning, the formation and structuring of the housing cooperatives or the legal restrictions it is pretty much unclear. Besides, these rules can be easily interpreted. As the legal framework for the city planning which was mentioned earlier lacks organisa- tion, it leads to a subjective, speculative and disastrous decisions.

2. Planning Goals

After analysis of the situation and background we state three planning goals concerning the problems and potentials on different scales.

Due to the isolation of Cheryomushki in the city scale the main goal is to make the district a green place of citywide importance. We believe it will attract new people and provide sustainability.

Because the open spaces in the district are undetermined and unclear, the goal for this scale is to enable “as much structur- ing as possible, as much freedom as necessary”. It means there must be a determinacy between the public open spaces and pri- vate land, as well as the preservation of the former structure.

In the microdistrict scale, we would like to organize the open spaces as a consistent system, which provides the microdistrict with a necessary fluidity, orientation and structure and there- fore solves the problem of disorder in the whole microdistrict.

3. Scenarios

We have considered quite extreme scenarios to find the right bal- ance. These scenarios were made basing on the ratio between public and private spaces, quantity of the greenery, delimitation of boundaries. We decided to consider these scenarios on behalf of the city administration, inhabitants and potential investors.

Our first assumption was to minimize commercial space and max- imize the public space as much as possible. The result of this ap- proach would be an inclusive city, which would be hard to maintain for the administration and would also be unattractive for investors.

The opposite approach, on the other hand, would leave the dis- trict with no control of the administration and pass it to wealthy inhabitants who would enforce strong segregation processes.

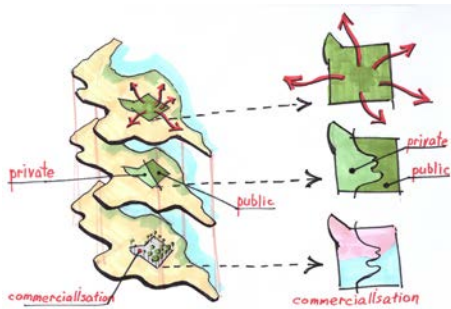
Therefore, we must aim for the precise and well-adjusted balance to ensure the organization of reasonable and healthy processes.

Our second scenario is about the organization of greenery. What if nobody took care of it and it would remain chaotic? Or, on the oth- er hand, what if the green spaces in the district were structured?

Though an unorganized greenery can lead to pollution and crime issues, which we can see today to a certain extent, too much



96.



97.

95 Scheme showing the interconnection of Cheryomushki and other parts of the city

96 Scheme showing the interconnection of green spaces within the city

97 Scheme showing goals on the city level

Before



101.

101 Scheme showing the density of green spaces as how it was before

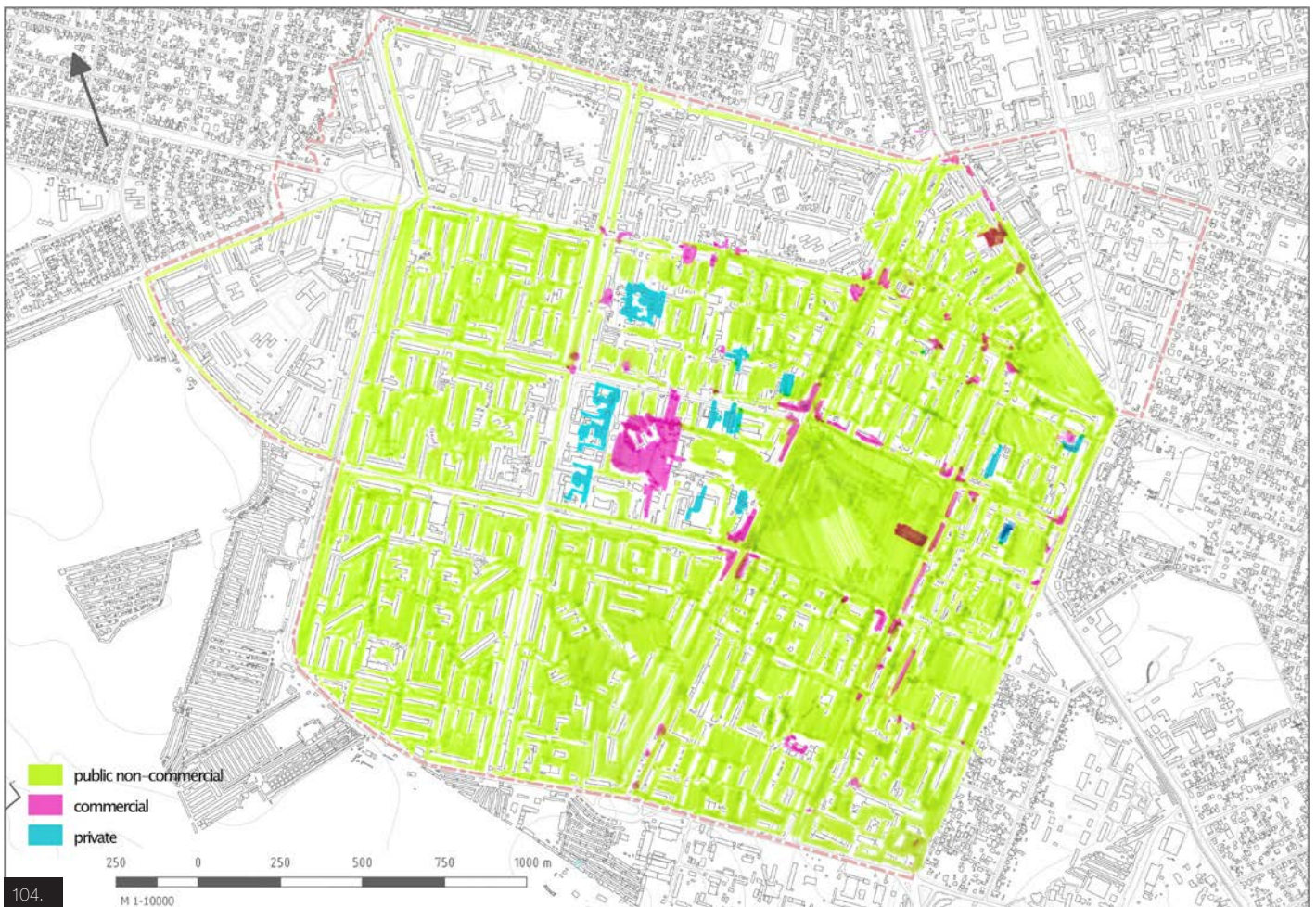
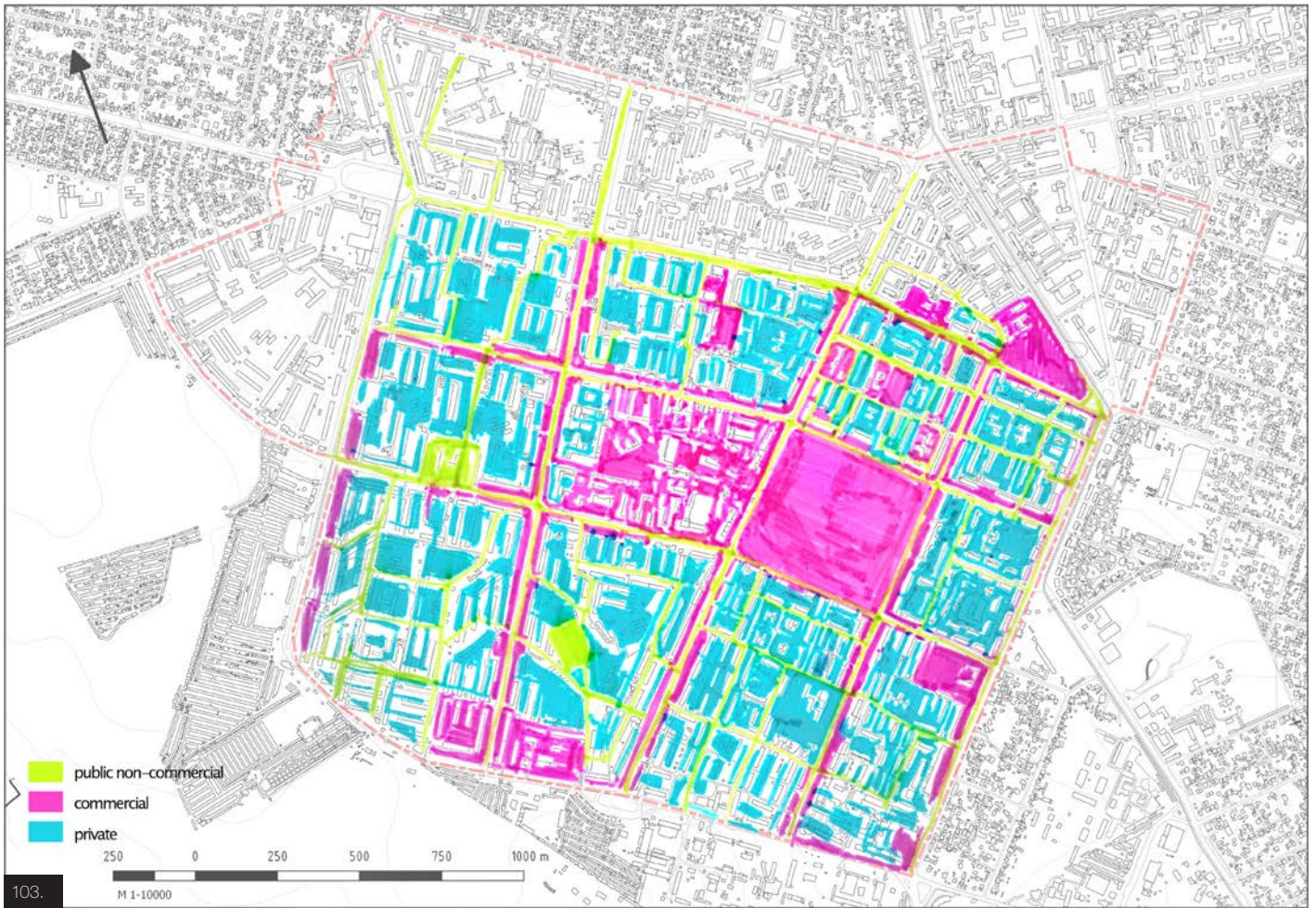
After

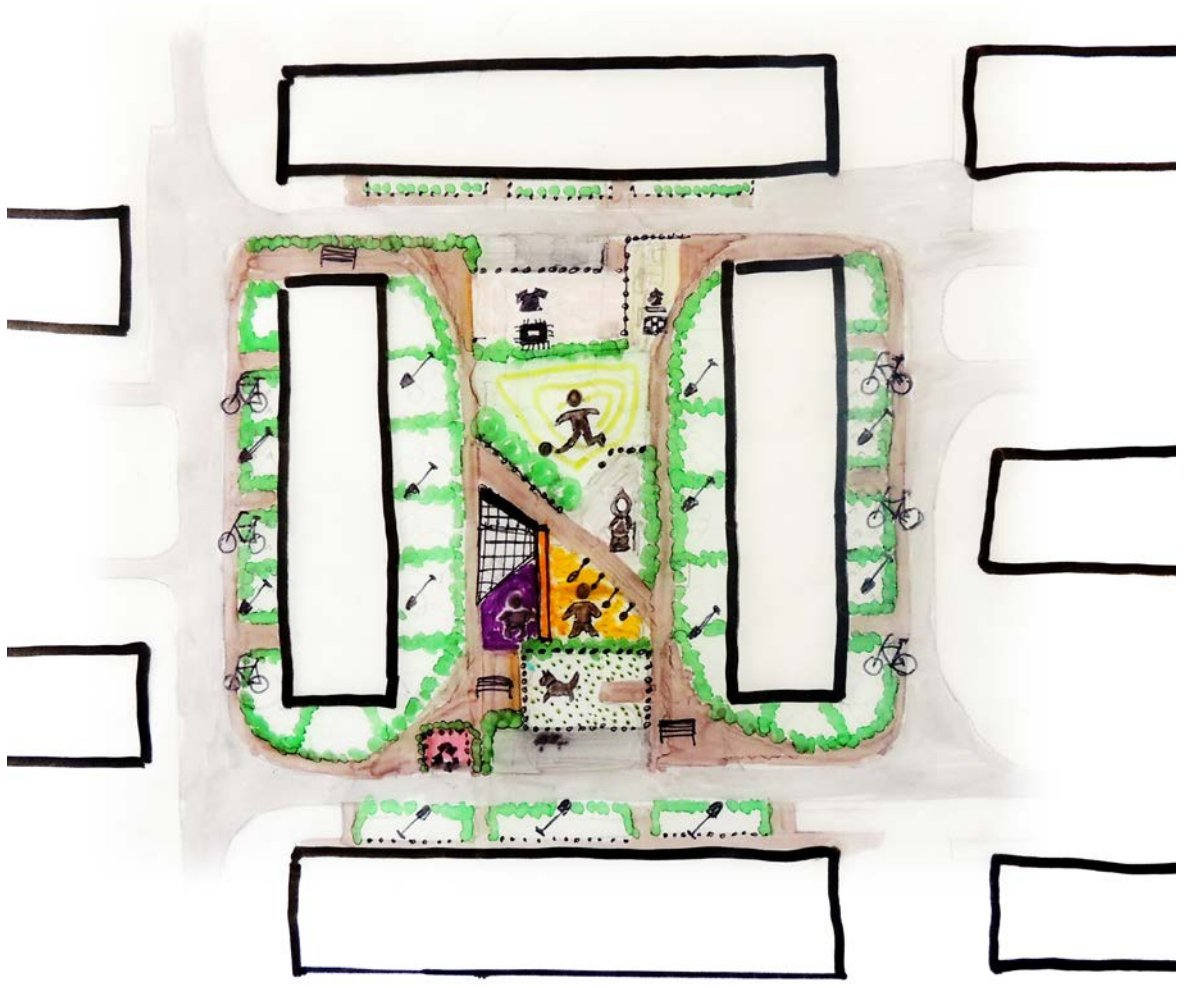
Microdistrict
1:2000



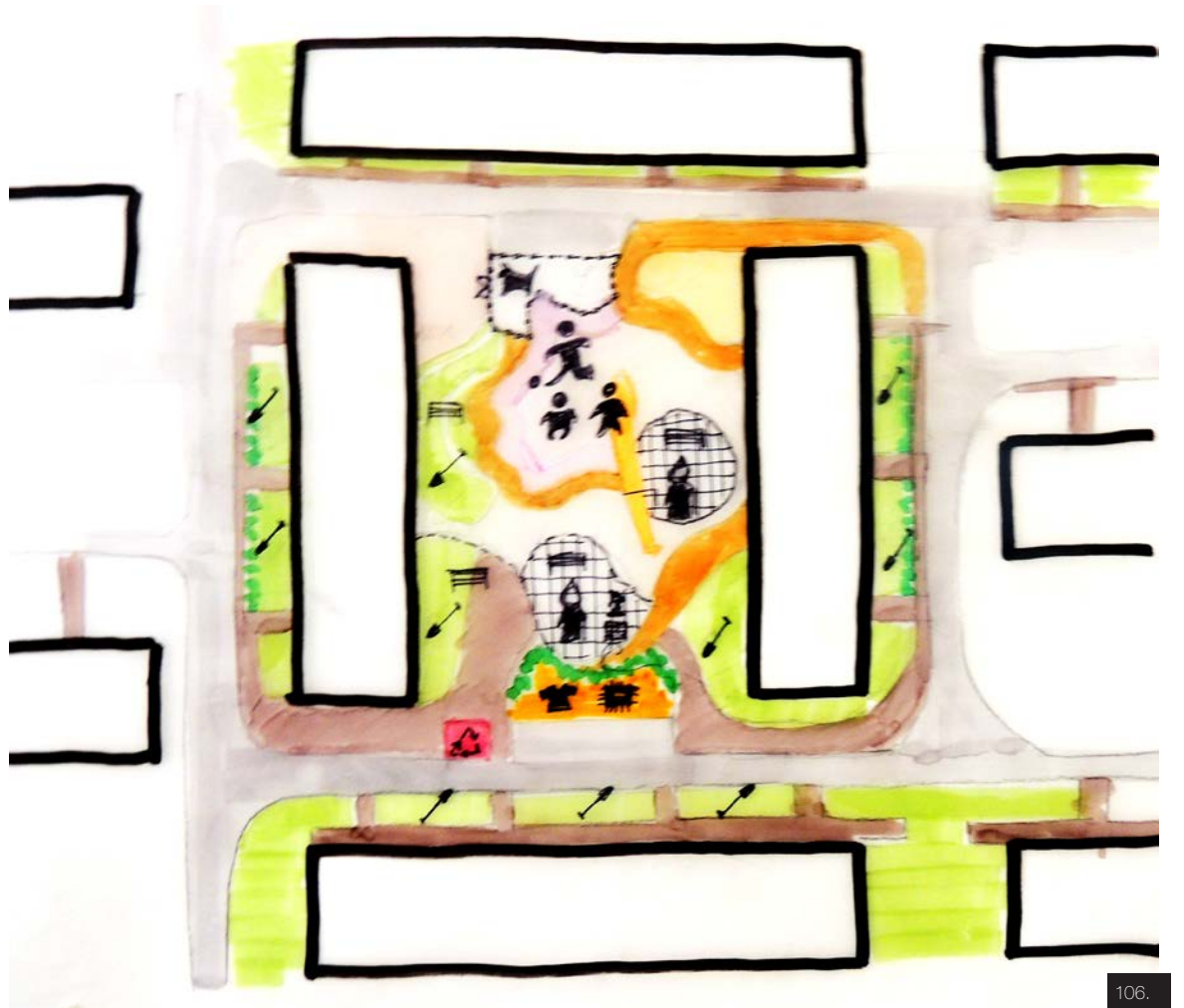
102.

102 Scheme showing the density of green spaces as how it is planned to be in future

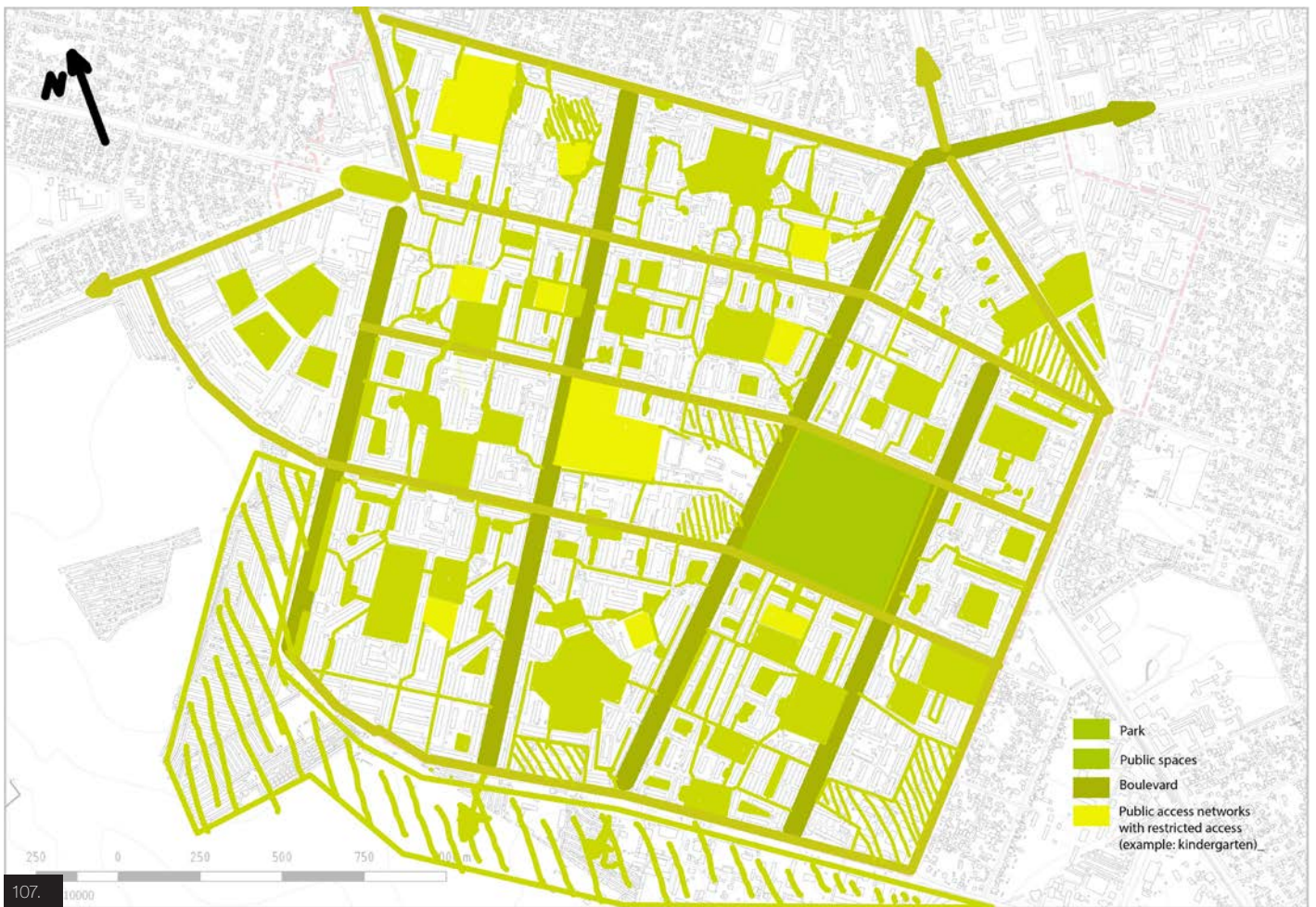




105.



106.



part of the green frame of the city and development of green corridors. The of the most important short-term measures should be the justification of the vegetation and its value by involving people to the process. Furthermore, another short-term solution is to demolish fences and boundaries where it is required. The long-term development is to formulate a sustainable green frame for the city and enforce the vegetation.

In the district scale we suggest the development of regulation mechanisms for the green public network on a districtwide scale in order to provide the hierarchy.

First of all, we suggest to initiate informal guidelines by involving the inhabitants of the district for the development of the green public network. Then these informal guidelines could be developed in detail by forming the green code for its further implementation on the territory.

As a long-term solution, the informal guidelines could be applied for the legislative regulation of the green public network on the whole district scale.

In the district scale first and foremost the land plot division has to be organized along the perimeter in order to define both public and private spaces.

Secondarily, certain rules have to be stated in order to develop an adaptive system and a precise design code.

Furthermore, a number of attraction points have to be developed, discussed and implemented in regard to the inhabitants' needs and wishes and according to the public requirements and possibilities.

103 Scheme showing the scenario of a maximized public space

104 Scheme showing the scenario of a minimized public space

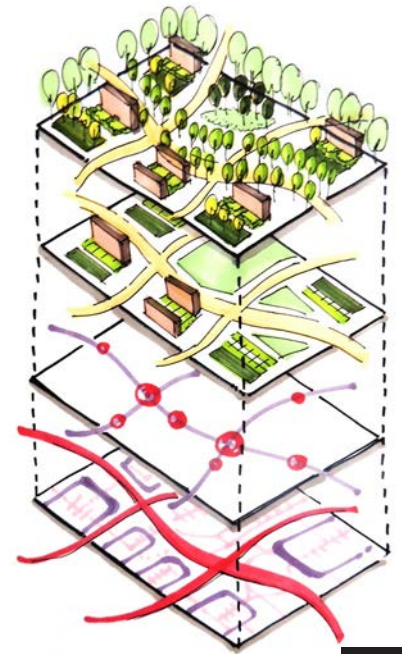
105 Scheme showing an approach of redundant amount of boundaries

106 Scheme showing an approach of reducing any existing boundaries

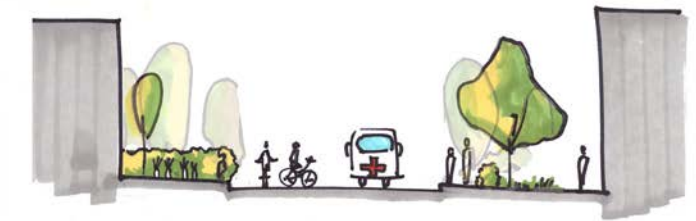
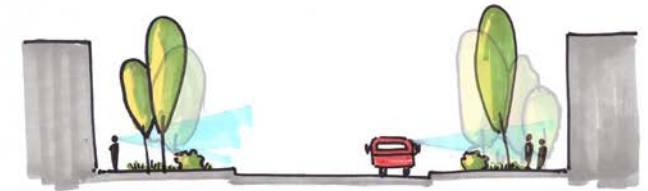
107 Scheme showing the proposal for the district



108.



109.



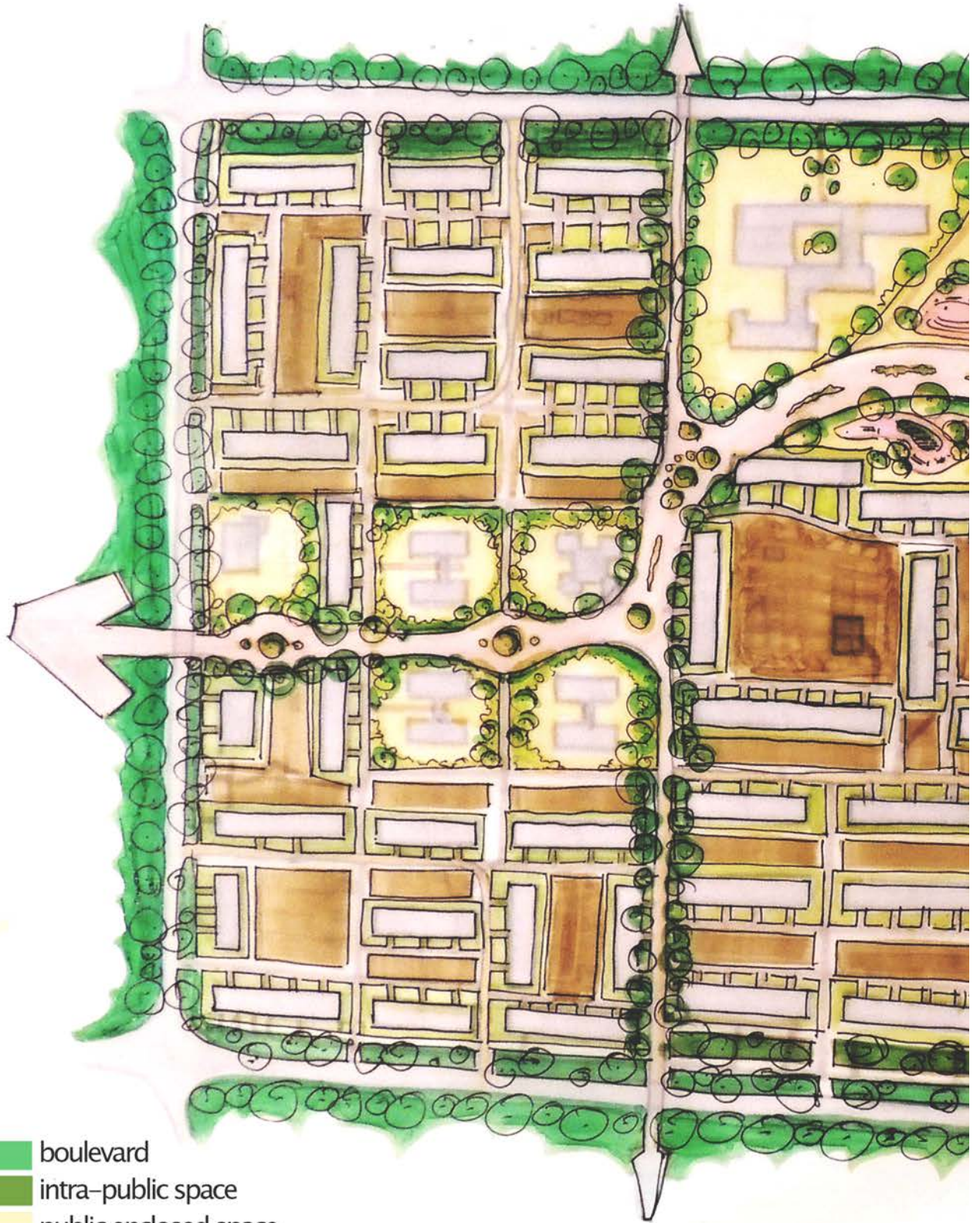
110.

In long-term, all defined inner paths and routes have to be improved and, possibly, integrated in the bigger green public network.

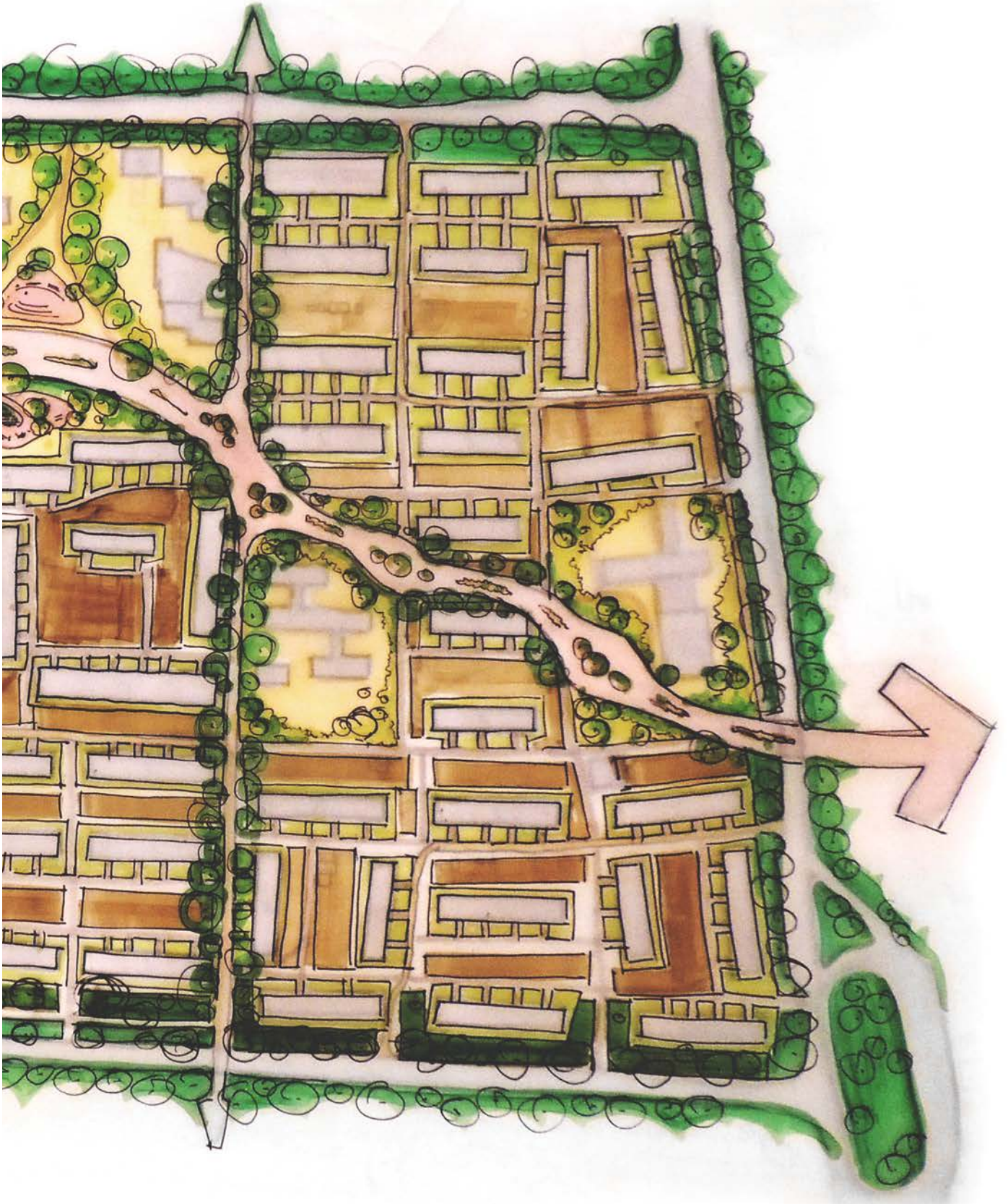
At the same time enhancement of the yards has to be monitored so that the balance could be achieved.

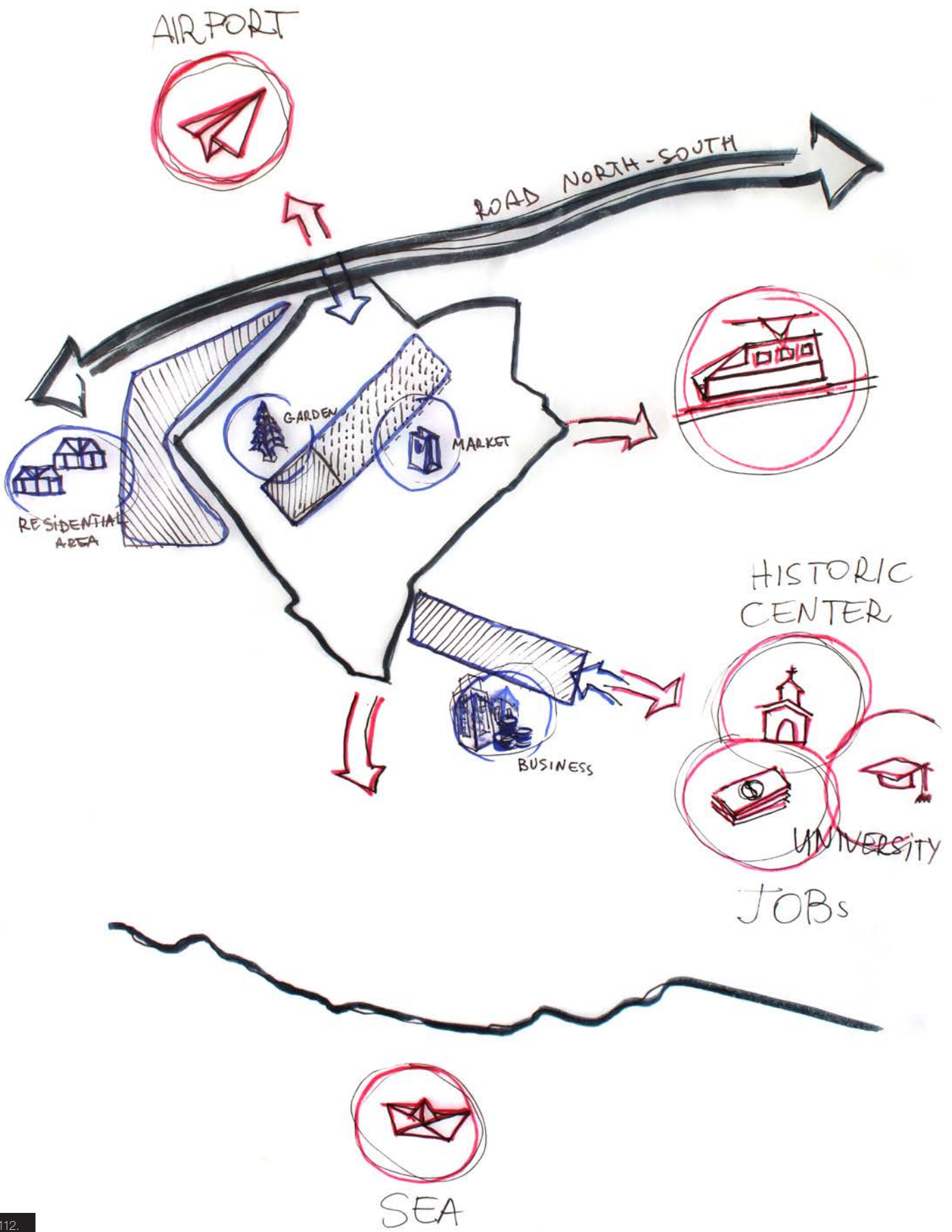
To conclude, our concept is to build up a flexible green network, which design and appearance can be up for debate but they always have to ensure the main idea of the concept.

- 108 Scheme showing one of the scenarios of microdistrict's development
- 109 Scheme showing a proposal for the district
- 110 Scheme showing the concept of space development



-  boulevard
-  intra-public space
-  public enclosed space
-  courtyard
-  private space





1. Situation and Background. Analysis.

Region

The existence of Airport, Railway and Sea Harbor should be considered as the strongest potentials on the regional scale. Traffic on this scale is mostly caused by tourism, education and business activities. Despite the potentials of the region, it is only accessible by cars and lacks a possibility to interchange by means of other types of transport. It causes huge traffic flows inside the city.

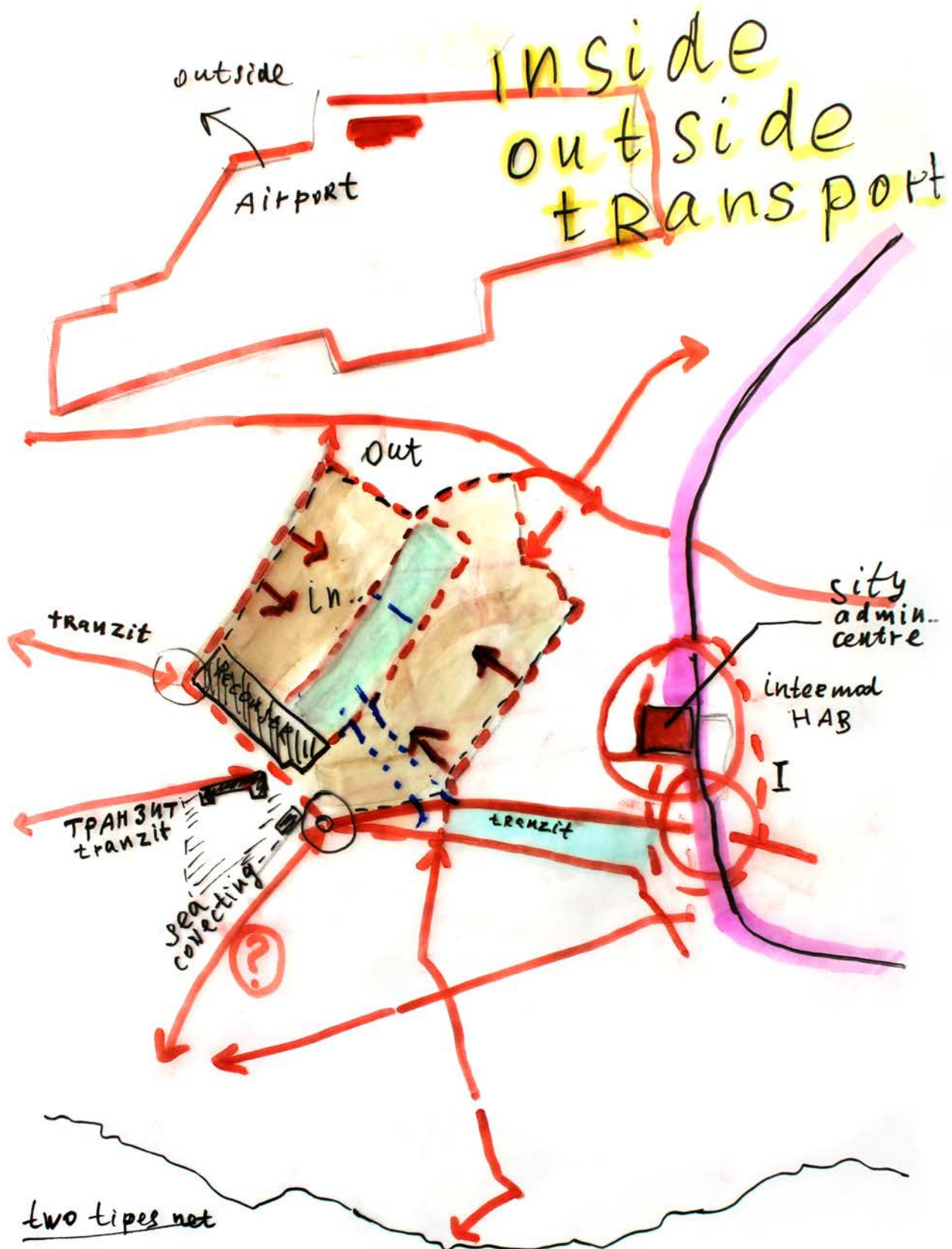
City

Existing street and public transportation networks can be seen as a potential. They are dense in the city center and become sparse towards the outskirts of the city. Multiple links can be found within street network, which can be used to establish optimal redirection and hierarchy. Those types of transport which were widely used in Soviet Times such as trolleybuses and trams are still functioning. At the same time, city public transportation network has no precise hierarchy, structure and efficiency on the roads.

The overall problem is the inconvenience of public transport which results in need for private transport and ineffective high dense traffic. Today's system is concentrated on certain streets and does not supply all areas with transportation service.

111 Scheme showing the conception in the microdistrict scale

112 Scheme of the potentials for further development



two types net

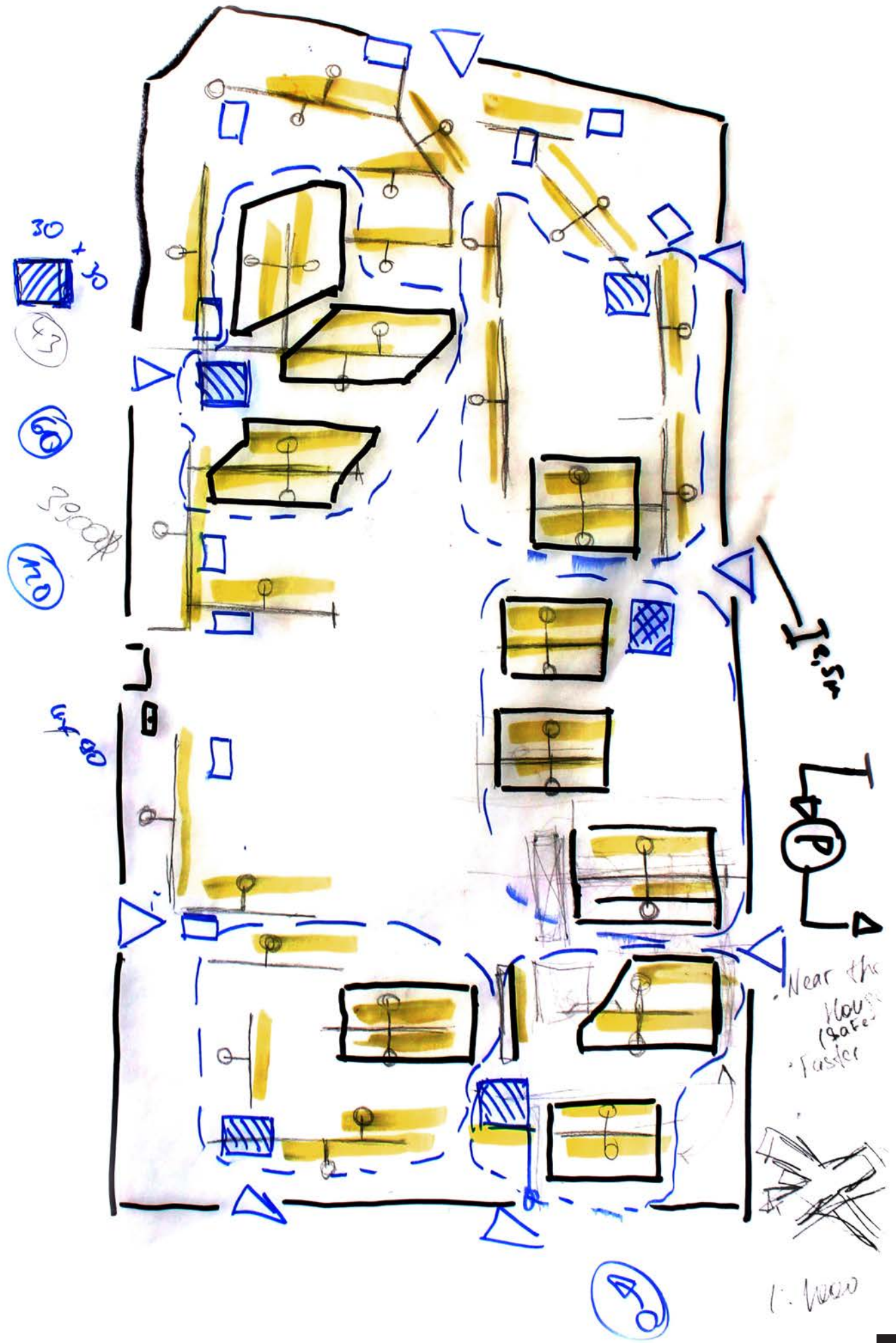


throw
- all
∞

Point
↕
Point P ↔ P

type of transport air

- 1 - inside microrion
- 2 - tranzit
- 3 - aglomeration
- 4 - Regional
- 5 - Global
- 6 - territory-
↓
agutocy





115.



116.

This is caused by several factors:

- Public transport is not fast. It uses the same lanes as regular cars and, therefore, it ends up to be in the same traffic jams. Trams are used to cover a huge area instead of going straight beside the center. On the other hand, the trolleybus network is not distributed over the whole city and is sometimes concentrated on a particular street.
- The bus network is mostly operated by private companies; they are not focused on suitable service for the whole city area. Their aim is to gain as much benefit as possible, which means they provide their service only in those areas which have the highest demand during the daytime. As a result, bus and tram stops are not always available in a 5 min walk accessibility.
- Since the public transport is split over several stakeholders, the system lacks a reliable organized schedule. Tickets are valid only in the bus or tram in which they are bought. That makes the interchange in a multi-model approach expensive and inefficient. A reasonable interchange to accelerate the city-wide network is not considered. This system makes it also impossible to implement subsidized public transport (e.g. a cheaper monthly ticket).

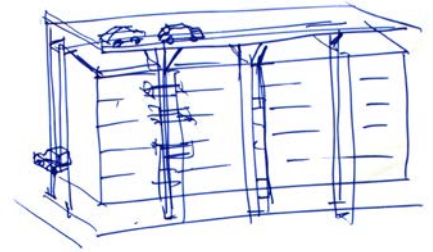
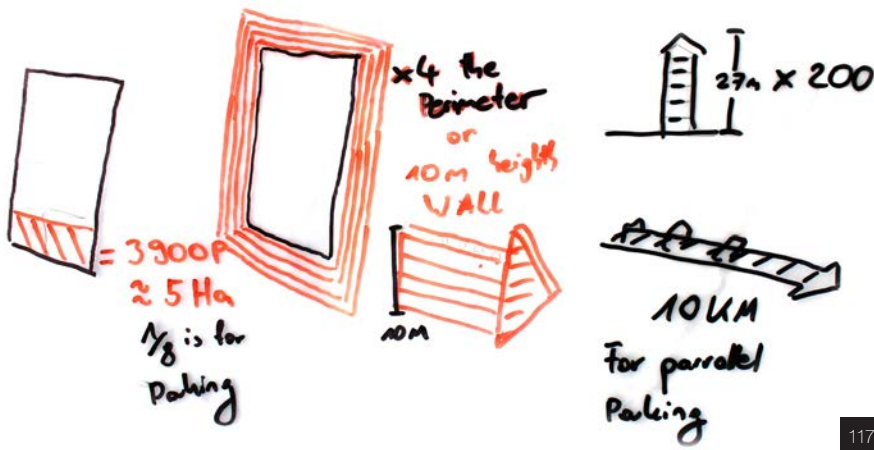
If no measures to solve the problematic traffic situation are taken, streets will become overloaded, which, in its turn, will reduce the travel speed of all road users and will also decrease the quality of life in Odessa.

113 Scheme showing the indoor and outdoor transformation of the district

114 Scheme showing concept of the multimodal parkings

115 Scheme showing current location of the garages

116 Scheme showing current location of unauthorized parkings



117.



118.

$1/8 : 1 \text{ CAR/FLAT}$

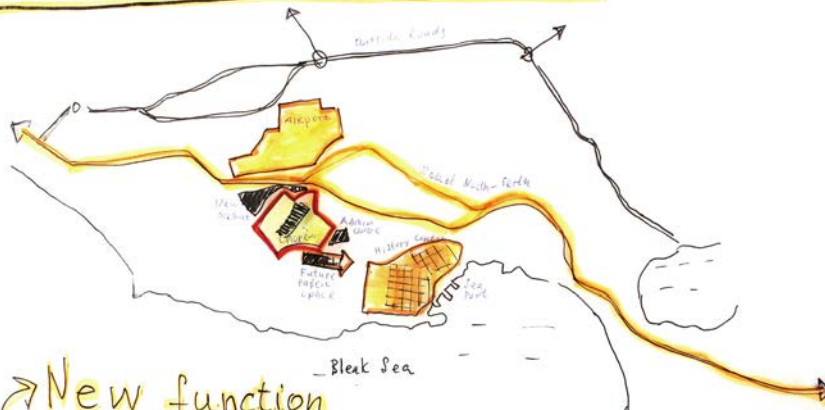


$1/4 : 2 \text{ CARS/FLAT}$



120.

Road North-South



→ New function
 { Cheremushky
 → New structure

New Situation
 New opportunity

119.

District

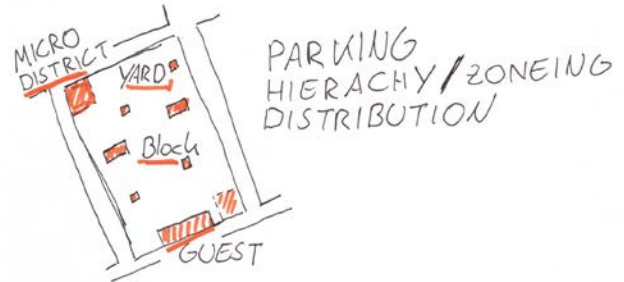
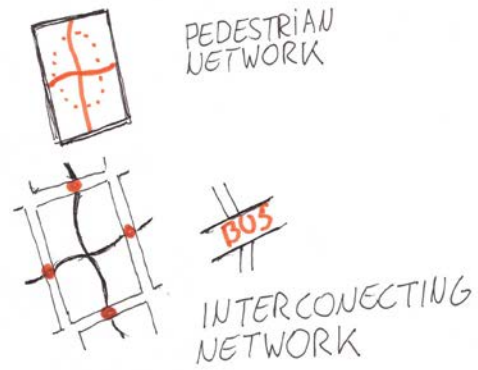
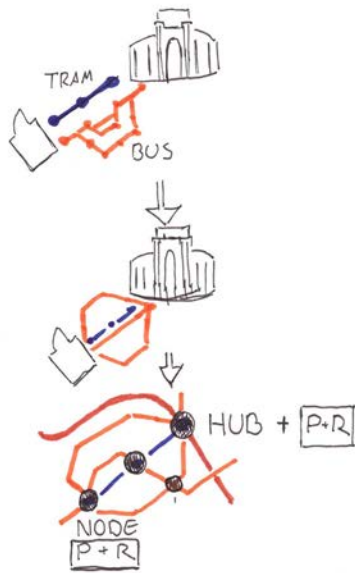
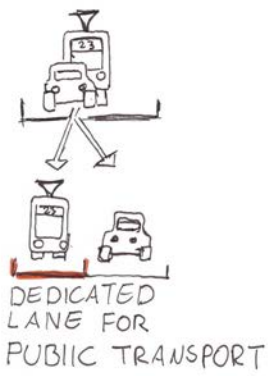
On the district scale, the existing urban fabric can also be seen as a potential. The wide streets bring many possibilities for the traffic reorganization, such as separation of private and public transport, supplementation of bicycle lanes and even parking lots for guests. The building fabric enables free movement through it. Not only the orthogonal grid for pedestrians and cyclists can be used as it is now, but also the diagonal one.

The problem is the public transport, which is heading to the city center and is not connecting the areas one to another. Residents of Cheryomushki cannot get fast to the neighboring microdistrict using the public transport and as the result they have to use private cars more often.

Microdistrict

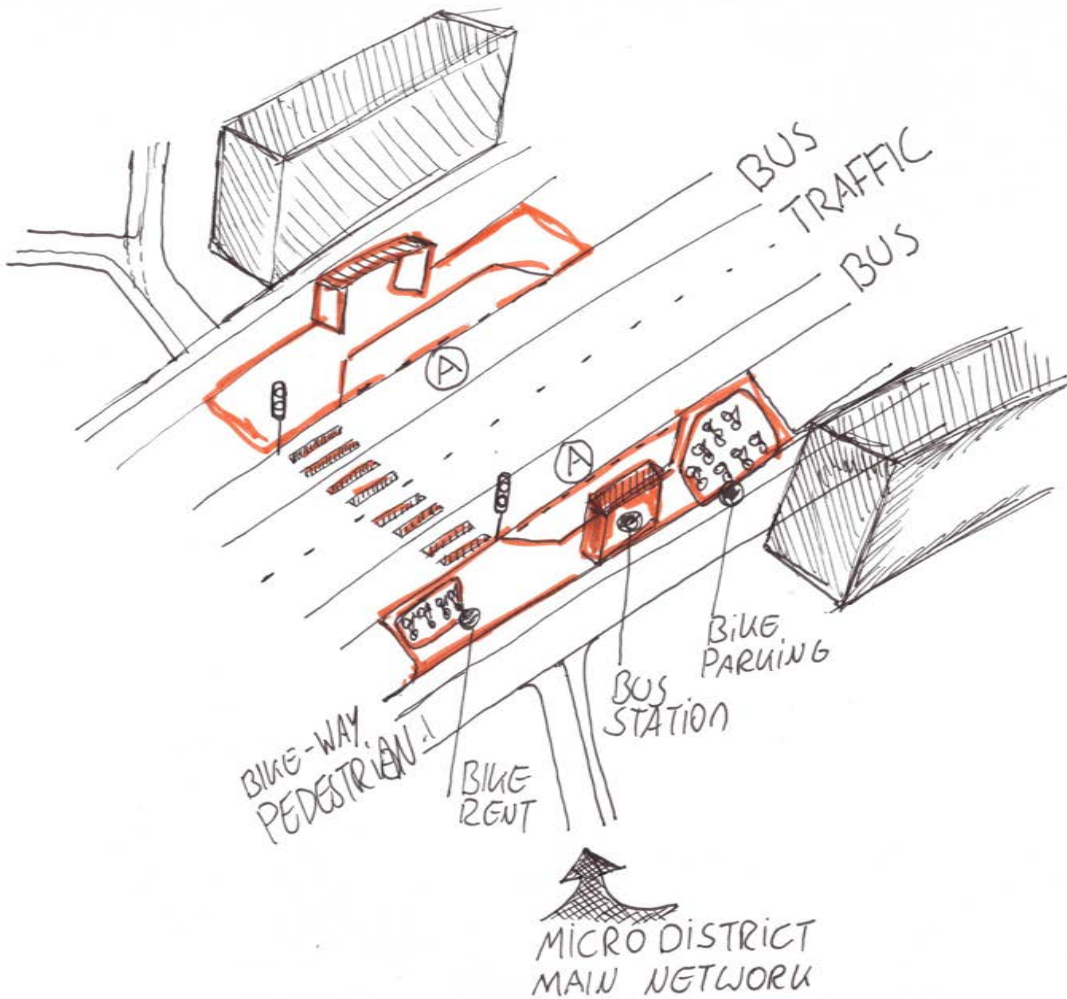
The potential of open spaces is hidden within microdistricts. Currently, these spaces are chaotically occupied by private garages, small shops and other buildings without any recognizable sys-

- 117 Scheme showing the analysis of parkings' quantity
- 118 Sketch of the parkings located on the roofs of the buildings
- 119 Scheme showing the North-South Motorway and its benefits
- 120 Sketch of the required parking space



121.

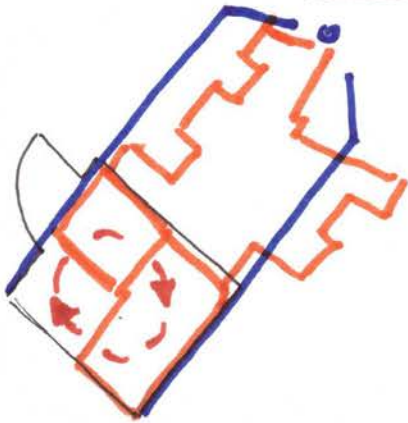
122.



123.



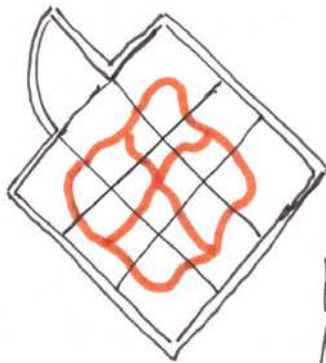
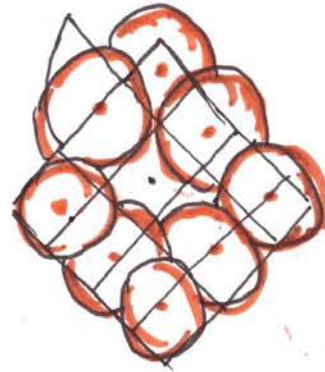
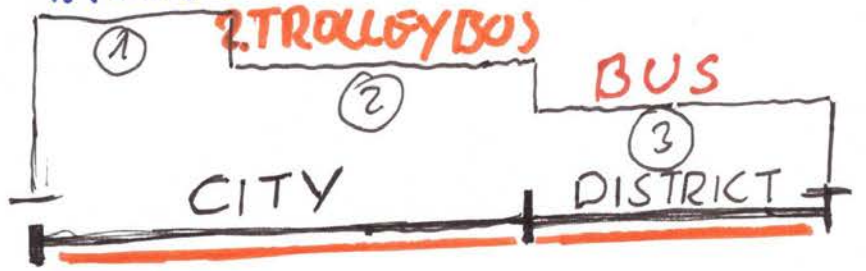
CENTRE



1. TRAM

2. TROLLEY BUS

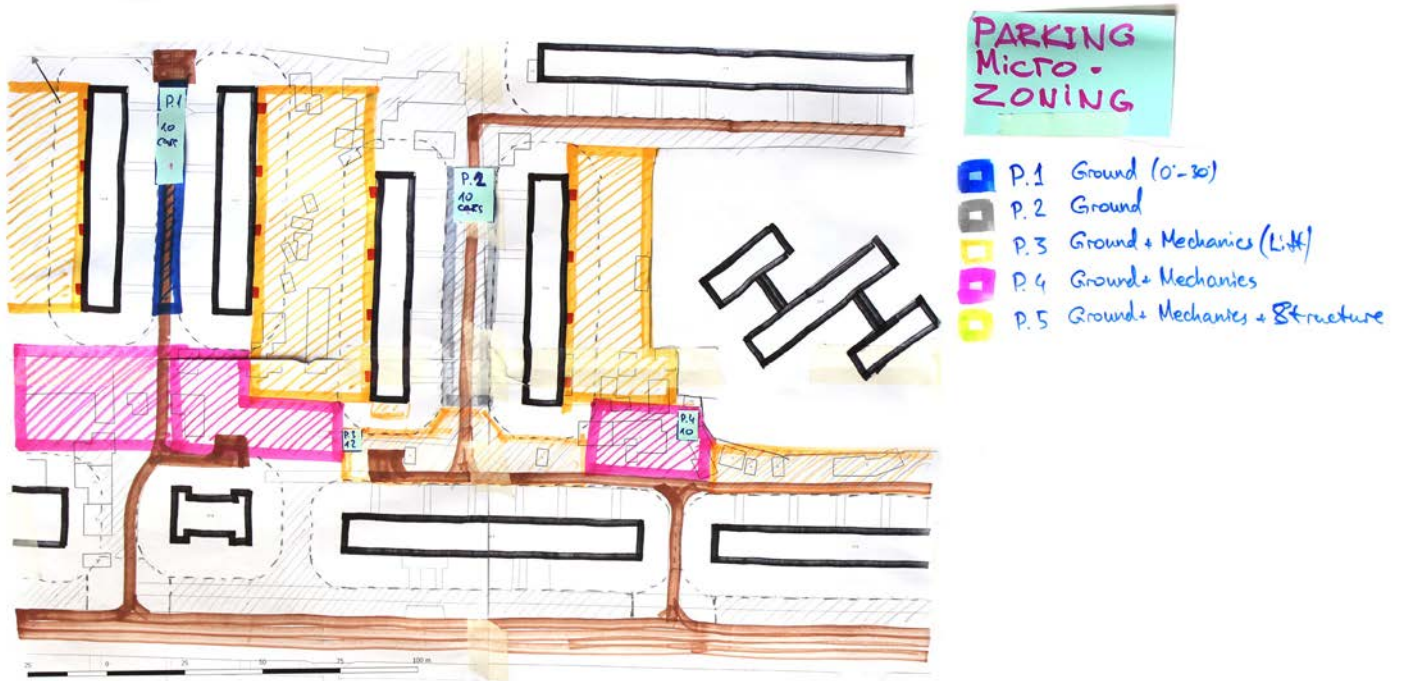
BUS



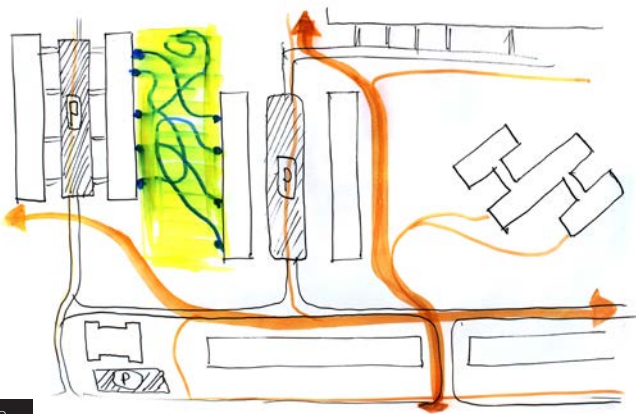
PEDESTRIAN NETWORK



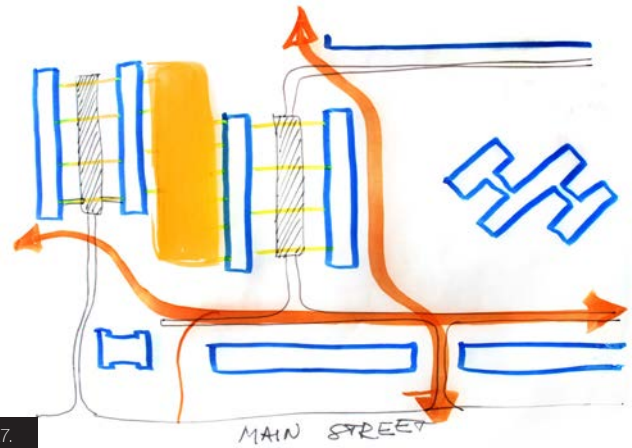
BYPASS DISTRICT



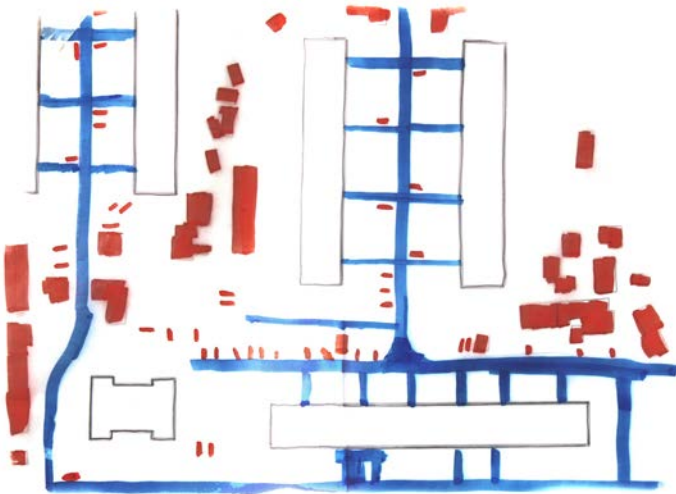
125.



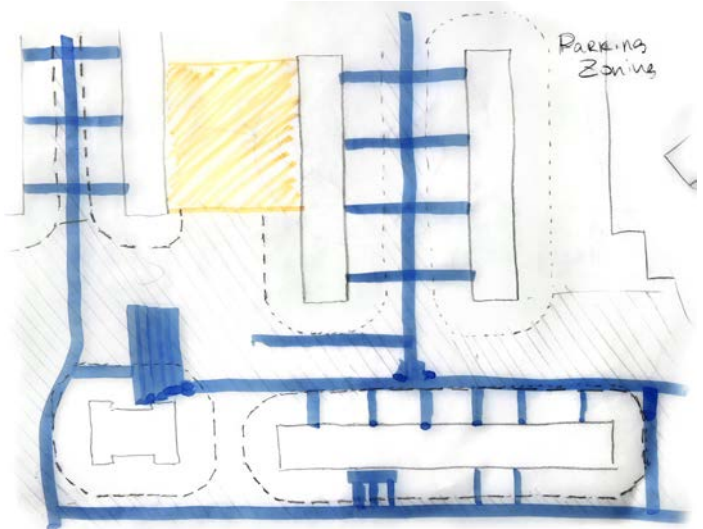
126.



127.



128.



129.

121 Scheme showing the main Conception in the city scale

122 Scheme showing the North-South Motorway and its benefits

123 Sketch of the connection between the microdistricts

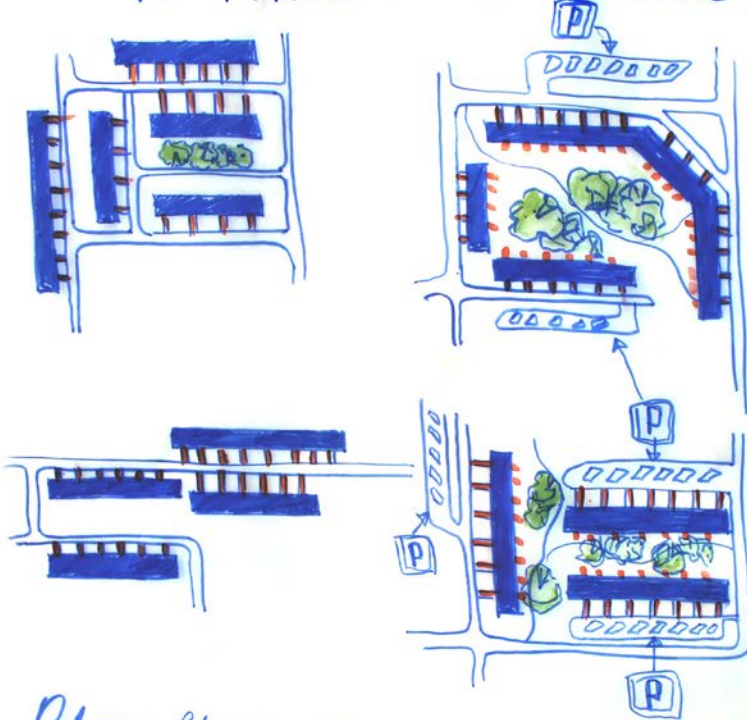
124 Sketch of the main conception concerning hierarchy of the public transport

Gen. Petrova



130.

NO PARKINGS IN THE YARD

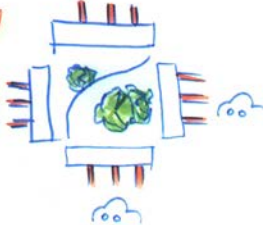


Odessa, Cheriomushky

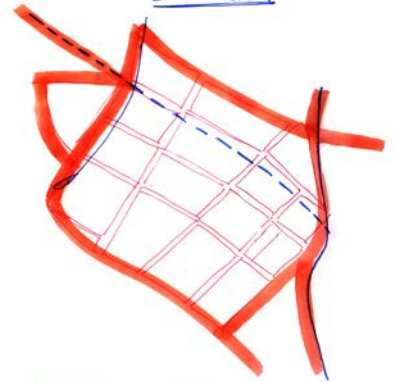
Berlin, Marzahn



• ORIENTATION OF AN ENTRANCE



• THE TRAM THROUGH THE DISTRICT



Odessa, Cheriomushky

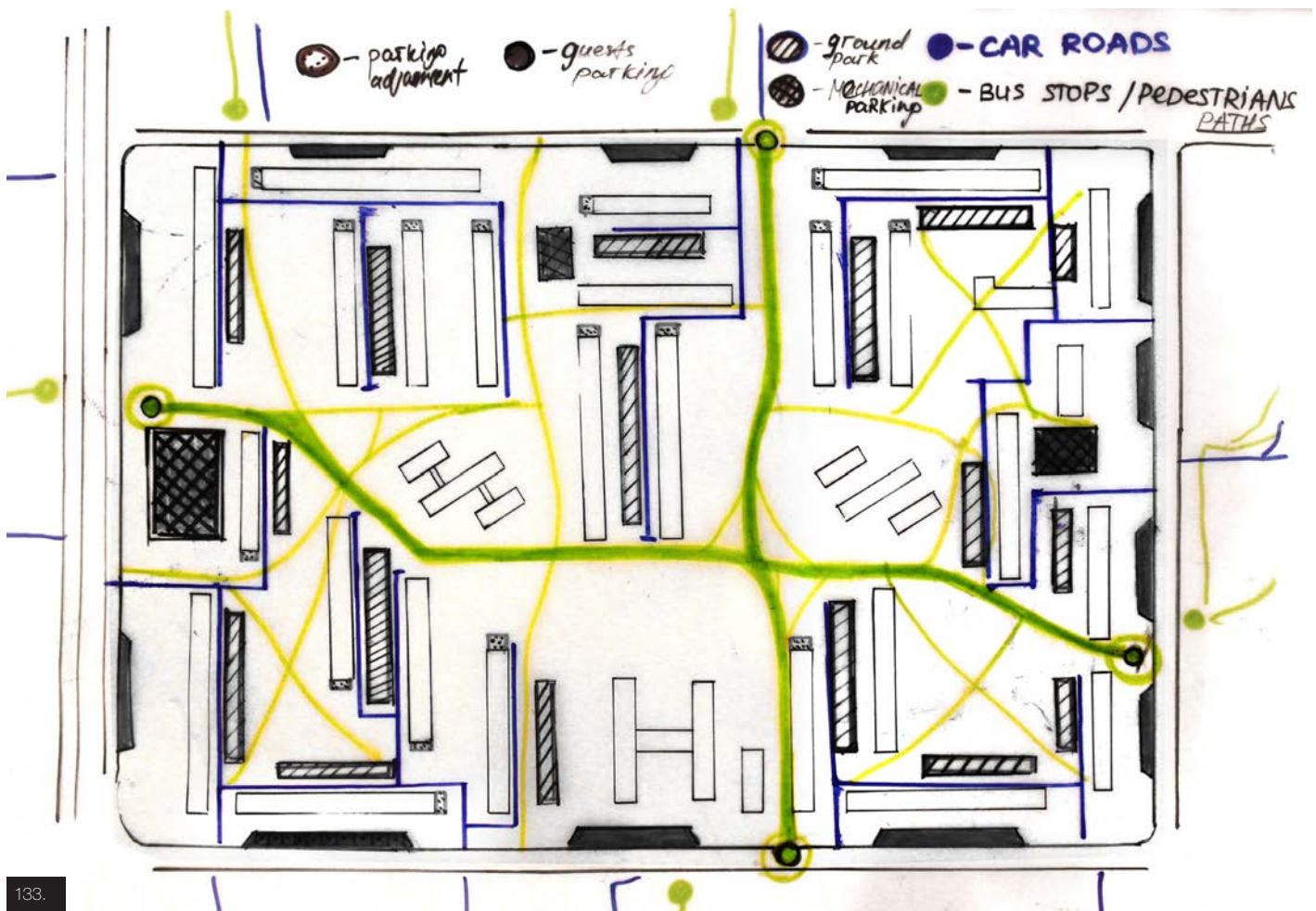
• THE MAIN ROADS SURROUND THE AREA



Halle, Silberhöhe

131.

132.



133.

tem behind their location. People can build a garage wherever they want inside the yards. It is not controlled by the government as it should have been. Parking lots are not organized even in front of the entrances to the local shops. Inhabitants define every free space and extra width of roads as a potential parking lot, which makes it inconvenient to move through the microdistrict.

Road network within microdistrict has a small amount of impasses, it is highly interconnected and allows crossing through the whole microdistrict in various ways.

The road network and the spatial configuration of microdistricts are only promoting the use of cars. The needs of pedestrians and cyclists are not taken into account. The pathways within microdistricts are often blocked by garages or cars and thus are not working the way they were initially planned to. If there are no steps done to improve the situation, the whole free space will be used for parking. As the result, there will be no chance for pedestrians and bicyclists to move through the area freely. Last green areas will be turned into parking. Illegally parked cars will occupy more lanes and will complicate traffic flows even more. Eventually, pedestrians will be pushed out from the microdistricts. All facilities like playgrounds, yards and schools will be replaced by parking. Using car for moving around the city, even for short distances, will be the most convenient way. In the end the whole spatial situation and the transport network will collapse.

Yard

Space in the yards, that is now taken by cars and garages, can

- 125 Scheme of the parking micro-zoning
- 126 Scheme of the concept of parkings and private gardens
- 127 Scheme showing concept of the pedestrian ways
- 128 Scheme showing the location of garages in the yards
- 129 Sketch of the concept of private yard
- 130 Sketch of the street section
- 131 Comparative scheme of the German experience (Berlin-Marzahn) and Cheryomuski
- 132 Scheme showing comparison of German example (Halle-Silberhöhe) and Cheryomushki
- 133 Final Conception, Team of Mobility and Transport, 2017

be defined as a potential for the development of a landscape and clean functional structure with the mixed-use facilities. The usage of the space, mobility and certain amount of parking space depend on the area and hierarchy of the nearby streets.

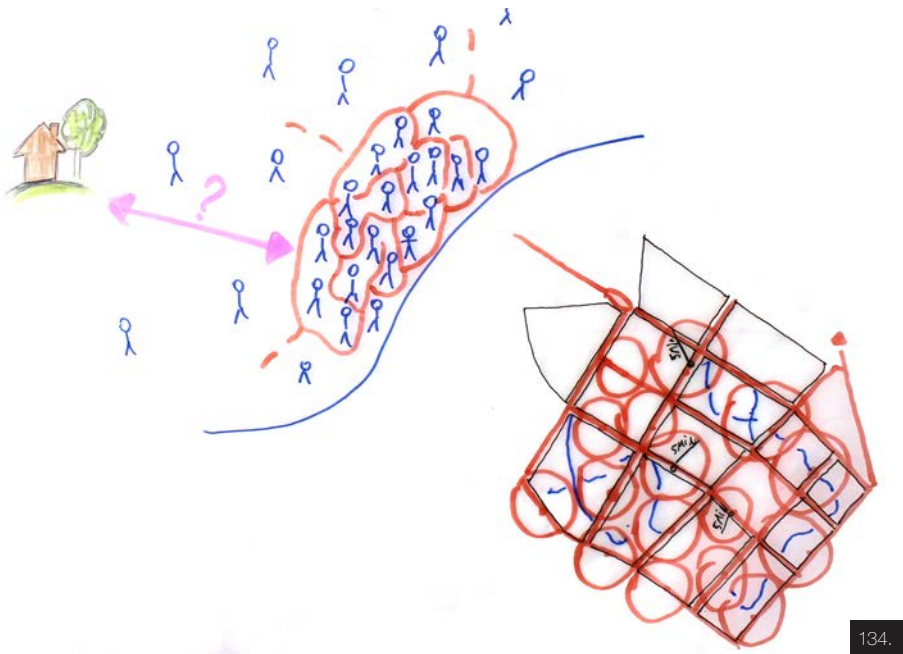
All roads are now accessible and thus the drivers can move and park wherever they prefer. Absence of any restrictions and organization led to a specific hierarchy of cars and garages which occupied almost all the free space within the yards. The existing number of parking lots does not meet the modern demands.

2. Planning Goals

Region

The main goal is to increase the possibility to travel within and outside the region.

While developing city street network with higher ranks, it is important to disable their tracing through the districts. They should be drawn along the borders of the districts as much as possible.



ant to disable their tracing through the districts. They should be drawn along the borders of the districts as much as possible.

The new highway envisioned in the general plan of Odessa and located on the western corner of the city will turn the traffic flows to 90 degrees and redirect them from the north-south to south-west direction through the existing districts such as Cheryomushki. Unfortunately, that will only worsen the traffic conditions.

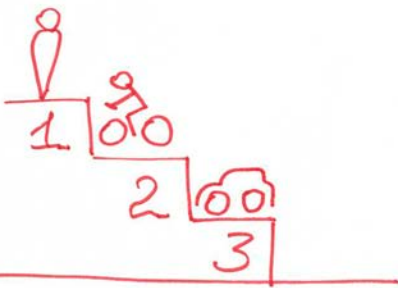
City

It is important to develop public transport as a single interconnected system. Its efficiency should meet modern requirements and become more comfortable for citizens than the private transport such as cars. Also, there should be a comprehensive network for pedestrians and cyclists.

The main goal here is the enhancement of convenience and re-

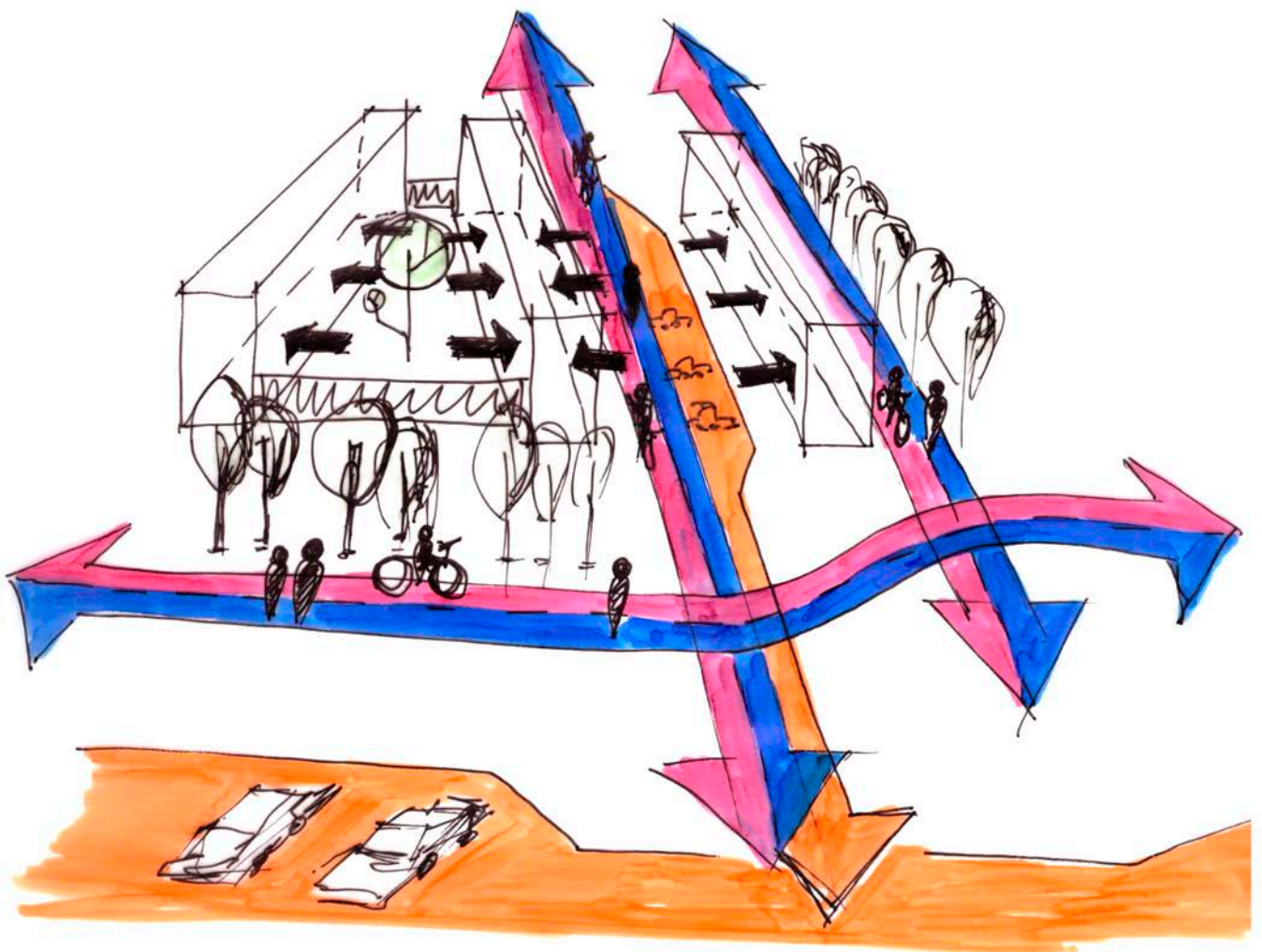
134 Only public transport scenario, Team of Mobility and Transport, 2017

135 Transportation Hub scenario, Team of Mobility and Transport, 2017

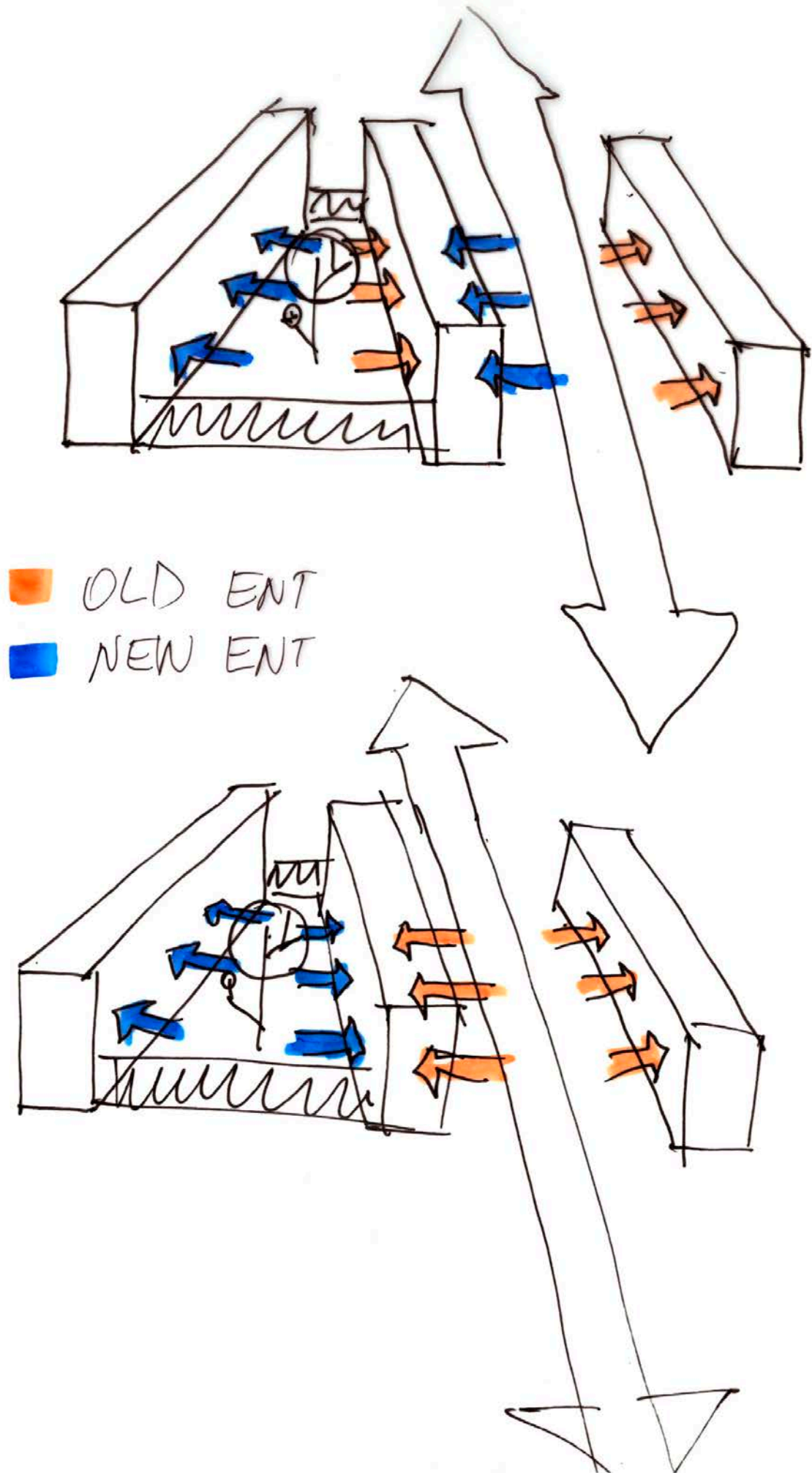


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liability of the public transport. Moreover, an overall city wide transportation strategy is needed. That includes possibilities to interchange between a bigger variety of transportation modes. The alternative travel modes should be prioritized.

The idea is to achieve a reliable multimodal and interconnected public transportation network to decrease the need for cars. Therefore, we propose to speed up the public transport and put it on the top of the transportation hierarchy.

Using the alternative types of transport should be the most convenient and fastest way to travel within the city.

District

Our goal is to implement an accessible interconnected district. It means a convenient public transport that includes bus stops with a proximity of about 5-minute walk and a secondary network for cyclists and pedestrians, where you can move both through the district and beyond its borders.

We definitely do not want to bring more car traffic to the district as it will only make things worse. We would like to give the priority to the pedestrians and public transport.

Microdistrict

We want to promote alternatives like walking, cycling and public transport. Car-use within the district and especially within the microdistrict should not be dominating.

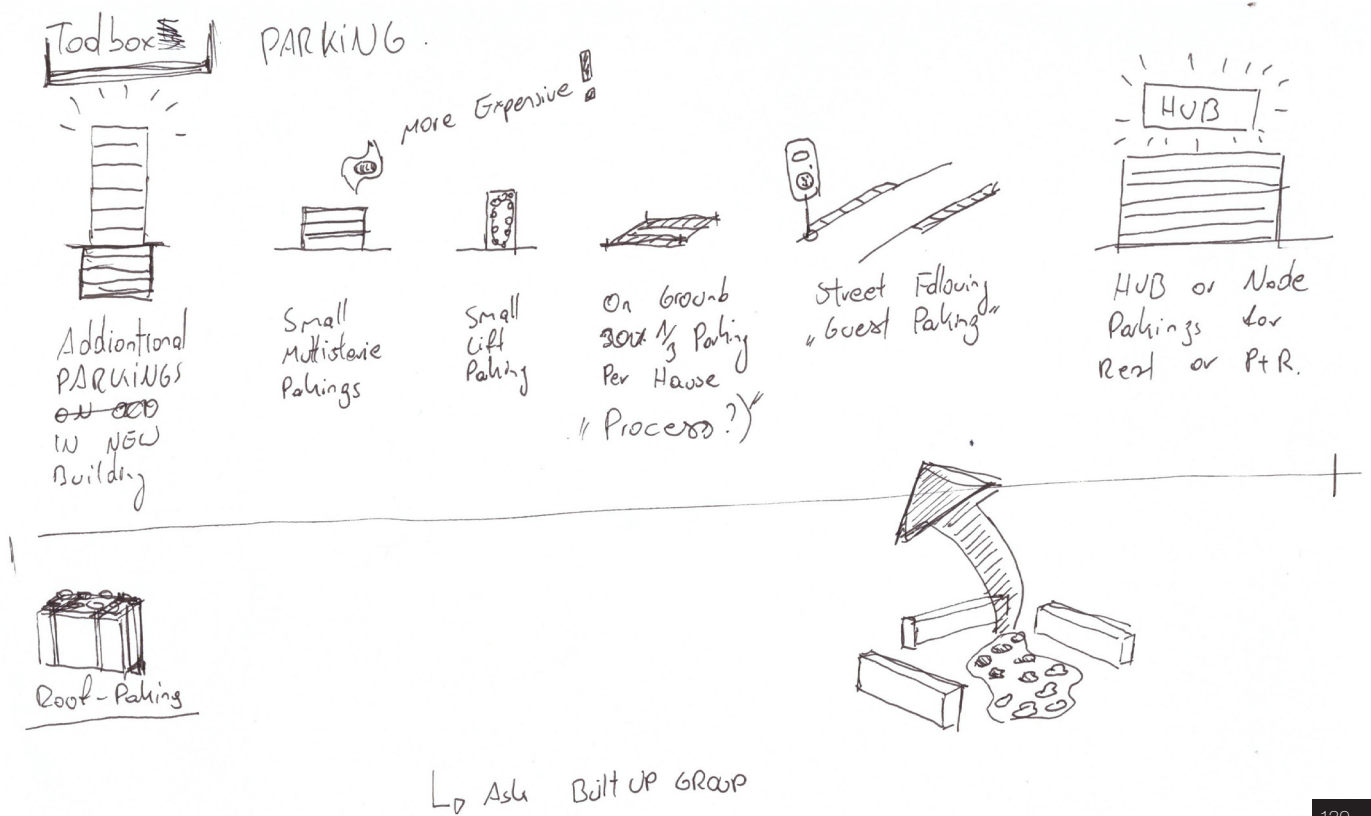
The point is to reorganize the parking distribution. All existing illegal garages should be removed and parking facilities should be spread among the district and the whole city. The interests of the pedestrians should be taken into account. Therefore, car drivers should not have a possibility to ride anywhere they want (e.g. pedestrian paths are often used for parking and the passage of vehicles). The opportunity to park in any place should be restricted.

The whole area should not be seen as a place for the cars in general. And thus, we have to enable the right balance for the limited use of roads (those for ambulance, fire engines and products delivery for schools and kindergartens).

We should separate the roads for cars from the pedestrian's paths. Passages within the microdistrict should end with blind alleys. The quality of the pedestrian routes also has to be enhanced and, moreover, they must be divided from the parkings.

Yard

One more goal of ours is to achieve a harmony between the mobility and functions inside the yards. That means we want to alter the existing hierarchy when cars are way above the people. We also plan to reduce the number of garages, establish restrictions on parking in the yards, preserving some places for the guest parking lots and providing the required functions with a free space. And last but not least, we define which yards are dead-end and which are transitional.



3. Scenarios

3.1. No cars. Only public transport

In case of the positive outcome, street capacity will grow, providing more space for alternative travel modes. Short passages for pedestrians will be more convenient and thus widespread. As a result, more profitable routes and bigger transportation network will be established in order to meet the emerging demands.

And if the negative outcome takes place, the whole lifestyle will need to be altered. For example, in cases when the use of car is essential, people will not have the mobility and accessibility on roads that is there now. A negative impact will also occur with the car related businesses.

3.2. No public transport. Only cars

The most beneficial part of this scenario is the increase in flexibility and mobility. However, it has great disadvantages such as widening of the streets, traffic jams, more parking places, etc. The overall decrease in the speed of life will take place. Social balance will be broken and ecological problems will appear.

3.3. Cheryomushki as a new hub

From the economical point of view this scenario is highly beneficial. Different steps such as the connection of Cheryomushki with the whole city, the implementation of new functions, the organization of traffic hierarchy and the increase of public transport will lead to the inflow of people and, moreover, to the sufficient investments in the whole district. The establishment of this interchange hub will also result in the reduction of the use of cars and the quantity of unauthorized parking lots.

- 136 Sketch showing hierarchy of different kinds of mobility
- 137 Sketch of the concept of the yard organization
- 138 Sketch showing new entrances to the residential blocks
- 139 Scheme showing the types of parkings

However, some undesirable effects will occur as well. For example, the overall increase of traffic volume, noise and congestion and the division of the district's structure.

4. Conception

Transportation system

The main idea is to implement a new hierarchy within the transportation network.

We want to reroute the main private traffic flows around the district and not through it.

Dedicated traffic lanes for the public transport will separate it from the regular traffic. Spreading and connecting the public transport routes with each other will result in the implementation of the interconnected city-wide road network. These steps will increase speed of public transport and will also make it more convenient compared to the private transportation.

Parking micro-zoning

The main idea is to develop a parking micro-zoning considering the private and community yards to be a car-free area. In order to achieve it, different types of parking were developed. This zoning map will regulate the organization of a particular type of parking within a particular area. The variety of different types of parking provides opportunities to meet different demands of the inhabitants.

An upgrade of social accessibility

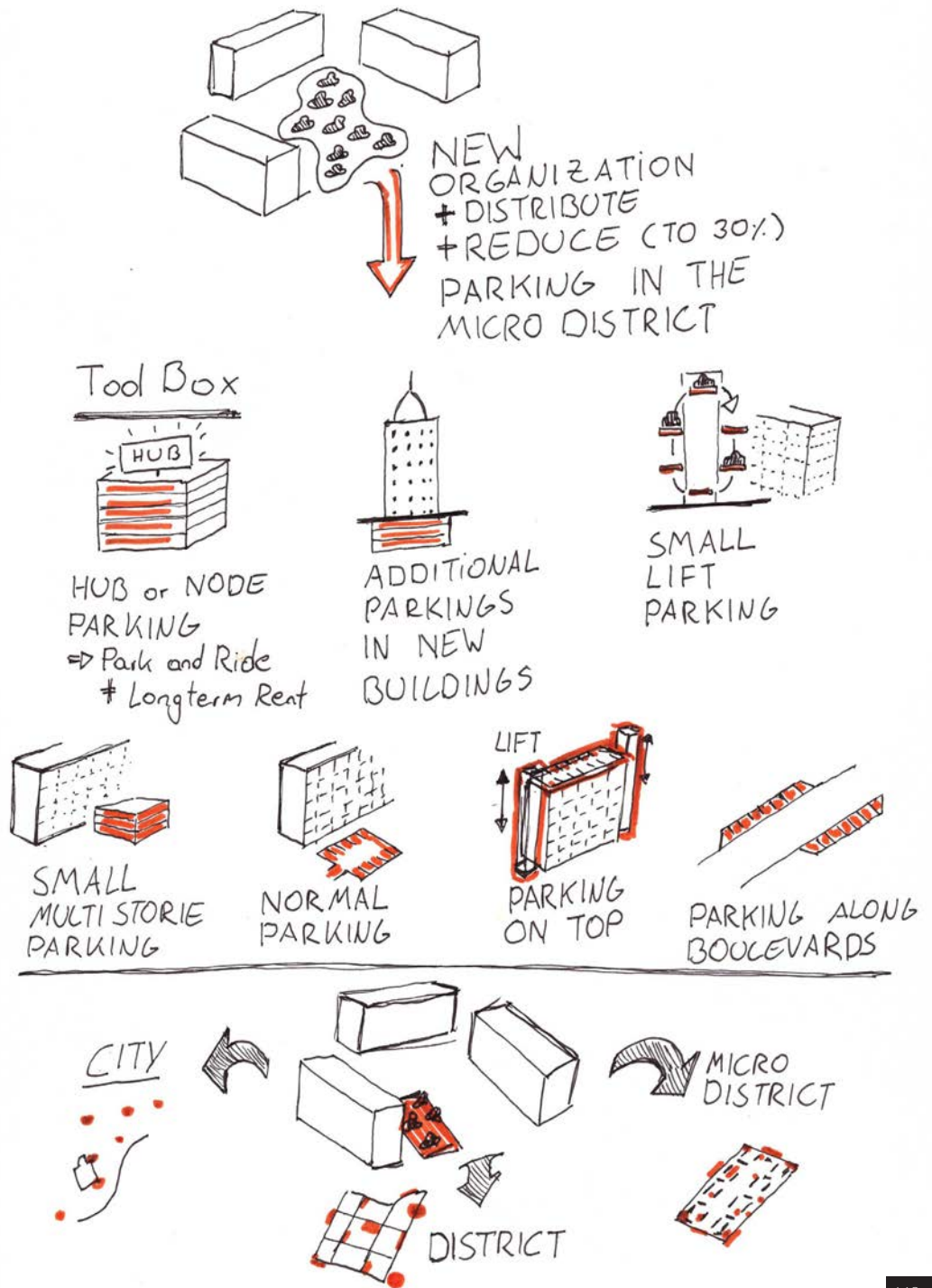
We propose a well-developed secondary network working as a short route for pedestrians and cyclists within the microdistrict. It will be a convenient and pleasant alternative compared to the existing situation. Cars, in their turn, will only have access to small streets connecting a few neighborhoods. By using this common street space pedestrians and cyclists can reach the main pathways.

This secondary street network links together functions such as kindergartens, schools and parks and connects them with other microdistricts. This network also enables a 5 min walk accessibility to the bus stops.⁵

5. Realization

Transportation system

Public transport has to be controlled by the municipality in order to be a reliable alternative for the private transportation. Thus a system of public transport cards has to be enabled. If a person has this card, he or she can interchange between several routes while paying only once. Private transport companies are allowed to ride on dedicated lanes only in case if they meet the municipal requirements such as 24/7 service.



Parking micro-zoning

A gradual reorganization of the unauthorized garages into new structures.

The first step is to determine areas where no cars should be present. Based on these findings, the zoning map, various types of parkings and the demands of the inhabitants the process can be initiated.

An upgrade of social accessibility

After defining the network of forked roads, the secondary network will be installed and connected with the new bus stops. That is only possible after removing the existing parking infrastructure. Therefore, a discussion with the inhabitants has to be started in order to achieve their understanding and acceptance.

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Herausgeber

KIT Karlsruher Institut für Technologie
Institut IESL - Entwerfen von Stadt und Landschaft

Lehrstuhl für Internationaler Städtebau
Prof. Dr. Barbara Engel

Englerstraße 11 / 76128 Karlsruhe
Telefon: +49 (0)721 - 608 2171
www.stba.iesl.kit.edu

Redaktion
Prof. Barbara Engel
Matthias Flörke-Kempe

Entwurfsbetreuung
Prof. Dr. Barbara Engel
Matthias Flörke-Kempe
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