Revitalization of brownfields by participatory process in Vilnius, Lithuania

Stakeholder analysis and case study in Markučiai and Paplauja territory.
The urban sprawl process takes more places in the world by leaving gaps in the core of cities these days when some industrial areas have been abandoned or moved into greenfields of city periphery. A recent research has shown that most of the conversion of brownfields has done by participation process in Europe. Therefore, this movement does not have a strong basement in the post-soviet union countries, and it is becoming more fragmented and decentralized tool in the planning system where planners’ opinion still dominates. The paper analyzes the public policy in the planning system and uses the design proposal base by people’s opinions.

The diploma thesis deals how with the aid of the public participation process the development of the revitalization of brownfield projects in Vilnius can be influenced/changed. Moreover, planners started using the public opinion and participatory process in the last decade of the country existence. However, still most of the designs are made by them and still keep their strong position in the planning in Lithuania. The old school professionals are influenced by the socialistic urban developing system which has been impacted from the central government and giving all power to the planners and administration of the city. In Vilnius administrative territory, there are several regenerations and conversion projects going on. The study was focused on Markučiai and Paplauja industrial area conversion in Vilnius. The study area is “Park of Architecture” project territory, which is the biggest conversion project in Lithuanian at this moment. Inspired by the works of theorists and architects Lucien Kroll and Christopher Alexander on the participation process, they were chosen as the main guide for thesis. Therefore, the study territory is part/next to the main Vilnius city core – the old town which is a sensitive area for inhabitants of the city and country. The theoretical part is a review of the participation process and the potential of its application/use. The paper uses two analyses to get the best result for the design part. The Stakeholder analysis and case study approach are followed by interviewing the people related with the project area, looking through official “Park of Architecture” and Vilnius city developing documents, mapping and visit area.

The paper indicates that the planners and public opinion are turning in a direction which is more flexible to interlocutor position and observation. However, the dominant opinion from both parts is to develop the area as part of the old town and find the connection with the natural environment. In the area, the functions have to have mixed use and to be available for the residents and visitors of the territory, as well as to the public areas, especially the quay on Vilnia river.

After investigation, observation and analysis of the study area, gathered information showed that a territory between Markučiai and Paplauja has problems which are fixable and by emphasizing the opportunities and using the stakeholders’ opinions, the territory has a possibility of ecological and sustainable development. The study paper is finished with the design proposal which transforms the study area as part of the old town and the city, and makes it attractive for investment, living and working. Maybe this thesis will help other conversion and regeneration projects in Vilnius and other cities to avoid mistakes as well as will inspire to work more often with stakeholders in participatory processes.

Key words: brownfield, conversion, revitalization, participation, stakeholder analysis, case study, industrial, Vilnius, urban design.
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1. Introduction
1.1 Background information

The cities of these days have been developed over many centuries and decades, which shaped the structure and development of the city. Industrialization has one of the biggest influent in the formation of most of the world cities when beautiful parts of a city like river banks, seashores, and lands next to transition axes have been occupied by industry, manufactories and military blockhouses which were developed irrespective the ecology and consequences to environment. Most of the industries and manufactories have been built independently from the city structure and density. Therefore, in Soviet Union period many manufactories had been built in spite of the city structure. Later some of manufacturers were abandoned or moved into greenfields of the city by leaving huge brownfield areas. (Figure nr. 1)

Projects about regeneration of brownfields are developed in Europe and in other parts of the world. Those projects take in inner-cities, harbours and river, lakes coastlines of cities, towns. There are few conversion projects in Lithuania where industrial buildings are being converted as lofts for living and offices, and others projects is just blueprints in paper. Revitalization process of brownfield is a new planning movement in Lithuania which has been continuing for around one decade. Also, there are several conversions of buildings, for example, German old military buildings used for Klaipeda University campus in Klaipeda. Revitalization of brownfields has been influenced by urban sprawl in the country when a big number of residents has moved to live into suburbs and industry and business offices have moved from the city centre to the edge of the city. It has made the city centre empty and the industry territories abandoned. Therefore, the city has grown up and includes old industrial areas which used to be next to the city periphery.

Figure nr. 1. Existing and future industrail and infras- trure areas in Vilnius
The city between West and East Europe has always been Vilnius city and has been historically developed between two parts of the Europe as a transition city. It is the largest city and the capital of Lithuania, one of the Baltic States in the north-east of Europe, with a population of approximately 523,050 people in the city, which covers an area of 401 square kilometres where 20.2% is urbanized. The population of inhabitants comprise of: 63% are Lithuanians, 17% - Polish, 12% - Russians, 3.5% - Belorussian and people of other nationalities. In recent years, there is a growing number of the inhabitants from Central and Eastern Asia. Located more than 300 km away from the Baltic sea, the city is in the southeast part of Lithuania; the city straddles the River Nėris, Vilnelė (Vilnia), Vokė and there are several lakes in the north part of the city. Vilnius city core is located between the River Nėris and Vilnelė confluence where the old town with tiny streets and churches was historically developed. (Figure nr.2)

Vilnius is famous of baroque style of the old town which was included into UNESCO World Heritage list in 1994 and it is one of the seven protected objects by this organization in Lithuania. (Figure nr.3) In Vilnius, the Parliament, Presidential office and its own government (municipality) are located. Therefore, the city is known as an education centre of the country where there are more than 12 universities, academies, and colleges where every year young people from different parts of Lithuania and others countries come to study.

As it has been mentioned above, Vilnius is a transition city between West and East Europe. Its geographical location has given a good opportunity to the city to grow up from a small town to the city. The city was a passage of different wars and occupation. These days, it works as a logistic centre where production comes from the East to the West and other direction by trains, planes and lorries. Looking back to the history, the city has been influenced by different historical movements and times. For the 60th years the city and all the country was a part of the Soviet Union which has had a big influence on the city image and structure these days. In this historical period, the industrial areas in the city were developed and located in war demolish areas of the old town after the Second World War some even next to city centre. Therefore, other industries were built next to River Nėris shore. All
this industry was focused on Soviet economic market. However, after the country became independent in 1990 some of the factories have closed by leaving the brownfields and abandoned buildings in the city.

These days, the city municipality is promoting the idea of the “Green city” and wants to become a sustainable city as most other cities in the world. Therefore, one of the city developers’ priorities is the conversion of abandoned industrial areas in the city centre and in other city districts these days. One of them is Markučiai and Paplauja historical industrial area which will be used as the object of the thesis project. (Figure nr.2)
In Vilnius city, two types of conversation processes are going on: projects for developing of industrial areas and gardening communities. These territories are planned to be transformed as city residential and office places, which would have all infrastructure and connection with the city. The converted industrial territory is 614 ha and there is no detailed documentation on how the conversion process has to be processed, therefore it is integrated into General Plan results. (Leitanaitė 2007)

Gardening communities were developed in the Soviet period, when small villages next to the city periphery changed as communities where residents of the city lived and spent their time growing their own vegetables, fruits, etc. at weekends and summer days. The GP 2015 solutions provide with the opportunities for conversion of territories of the gardening community into territories of single-family residential houses (the existing total conversion potential is about 600 ha). The conversion of gardening community territories is encouraged by the City Municipality providing the support to the development (by producing detailed or special plans) of engineering and transportation infrastructure of comprehensively planned gardening allotment territories. (Vilnius City Council. 2007 Feb. 14, p. 24).

The conversion of the brownfield is defined as a new (secondary) use of built territories of polluting or inefficient industrial and utilities enterprises and other built territories used inefficiently for the development. The municipality encourages to create multi-functional conversion by new uses of the territories both for residential function and for creating jobs in the modern economy. Conversion enhancing integrity of the functional and physical structure of the city, facilitating pollution reduction, creating investment-friendly environment, facilitating more even distribution of residential territories and jobs in the city, facilitating renewal of the environment, buildings, the transportation system and engineering installations in the urbanized city territory is encouraged. Priority conversion territories are as follows: inefficiently used territories in Naujamiestis, Šnipiškės, Vilpėdė, Žirmūnai and Žemieji Paneriai (Vilnius City Council. 2007 Feb. 14, p. 24). (Figure nr.5)
These days conversion of brownfield area is concentrating in industrial buildings administration buildings and territories by converting it as lofts for living and working. Two projects are going about conversion process of territories by developing them for public and recreation needs (in Naujoji Vilnia industrial area(Figure nr.6) and “Park of Architecture”). Moreover, one conversion project has been stopped by public intervention and economical changes, when a project company wanted to build residential and shopping centre building in the brownfield territory next to Vingio park. Also, these are eight projects about regeneration of industrial buildings going on. The biggest project is “Loft town” (Figure nr.10) which has taken the territory of the Kuro aparatūros (fuel equipment) factory by creating a town in the city which creates/establishes habitable, commercial and working environment. The “Belmontas Loft” was an administration building which had its spaces converted as lofts for living and working, and located in “Park of Architecture” territory. (Figure nr.11) Most of the buildings in projects are renovated and adapted as apartments, therefore, some project companies propose space for offices, restaurants, grocery stores and etc. Lofts are the most common key word used in creating regeneration and conversion process in Vilnius city. Moreover, most of the projects are located next to the developed infrastructure system of the city. However, none of these projects have been developed by working with stakeholders and communities to predict what kind of residents are going to live and use these places and spaces. The projects have been designed by architects and clients.

List of projects:
- Radio Loft
- Soho Loft
- Ateities st. Loft
- Loft Town
- Belmontas Loft
- MicroLofts
- Kuro aparatūros Loft
- Vytenio st .50 buildings
The paper is discussing one of conversion projects in Vilnius, Lithuania, which territory will be used for studies. The territory of the project “Park of architecture” will be used as the study area. Decision to choose this territory as the study area has been done because the project of this territory is just a blueprint and planning process is still going. Therefore, this territory is next to public sensitive territories (the old town, river Vilnia, Belmontas Park, etc) and its future development could influence the quality and economy of the city core life.

“Park of Architecture” is the biggest conversion project in Lithuania which was initiated by Vilnius municipality in 2008. (Figure nr.15) The project has been divided in few stages which will be developed by several architectural offices. This project covers historical city territories - Paplauja, Markučiai – which are located between Vilnia River, Maironio st., Subačiaus st. and Pavilnio st. Half of this area is abandoned and, another part is used by existing several working industrial companies. This territory is divided by Drujos st., one of very intensive traffic streets in the capital. This area is surrounded by the old town, private living houses and natural environment. Project “B-TEAM” is a guide for Vilnius municipality and it attempts to regenerate the industrial area in accordance with principles of sustainable development, and is supported by European Regional Development Fund through the INTERREG IVC program. (Urbonaitė, I., 2012)

This day the project company “Vilniaus planas” has approved one of the parts of the territory “Skaiteks” detail plan which aims to save historically and culturally significant buildings and facades, other buildings to demolish and build new houses whose structure, density and style are similar to the old town buildings. (Figure nr.16) Regenerated buildings could be used for offices and commercial premises. Planners have projected a new children’s daily care centre and hotel in the territory. There is due to clean up no value trees and bushes and save trees next to the river Vilnia waterfront and create new public places accessible for future residents of the area and public.
This thesis topic was chosen because Lithuania as homeland is becoming every-day more European country; even the planning system is changing in the direction that a planner and architects work with residents in projects where public is having the voice to express their opinion and wishes. There are some good participation examples in the country but still there are a lot mistakes done in this process. Therefore, the problems are caused not only by professionals but also by stakeholders when they don’t know how express their opinion, they do not trust a planner or think that all this is just a political thing and nobody will take their opinion seriously. These problems set to choose this topic of revitalization of brownfield by looking from participatory process in very sensitive place in the capital where public opinion and participation should be the key for the planning process.

My research question: how participation process could influence the regeneration process of the brownfield land by addressing it from stakeholders’ opinion in a sustainable city vision.

The participation process theory by Lucien Kroll and Christopher Alexander “A pattern language” is going to be used as the base guide for the participation process “with people and by people” in this research. Case studies of regeneration projects in Hamburg, Germany and Poland will be analysed as example projects and will help understand how the participation process works in practice.

Studies analyses the practical use of working with stakeholders in the regeneration project in Vilnius, Lithuania by giving as the final results of the design proposal for the study area. Paper doesn’t research the historical development of the participation process and gives only overlook of Lithuania urban development, by giving the main urban planning process about the past, present and future. The study area was picked up because Lithuania is a part of Europe and country’s urbanization goes very fast by providing good and bad examples. At the same time, with the help of this paper it wanted to show that people opinion should be listened more deeply than just being asked and forgotten about it or even disregarded.
There is notable that planners have been using residents participation in planning and designing process of the areas by reviewing other good developed revitalization projects of brownfields in the world. In this thesis will be use two methods: stakeholder analysis and a case study; by comparing with each other to get the best results. The stakeholder analysis would help to collect information from various personal interviews and analyzing the results of the questionnaire which would give person’s opinion and state their position in the planning process. Also, It will gather information from mapping, visiting area and documents about analyzing project and other familiar projects by case study. All this collected information will be looked for participation position, planning and design position that the result could be used for the next step design proposal as main guides of design.

2.2.1 Stakeholder analysis

Stakeholder analysis is an approach, a tool or set of tools for generating knowledge about actors- individuals and organizations and interests; and for assessing the influence and recourses they bring to bear on decision-making or implementation processes. (Varvasovszky, et al., 2000, p. 338) Stakeholder analysis will be used as a tool to collect data which would help to understand the main problems and opportunities of the area looking from residents and planners view, and assist to create a vision for project design. Being clear about the aim helps to identify the scope and time dimensions of the most interest: past, present, future. (Varvasovszky, et al., 2000, p. 338)

The beginning of the stakeholders’ analysis approaches and concept have started with business management from early 1930s, later it was starting to be used in development and health policy fields during last decades. The widespread use of the term ‘stakeholder’ in common parlance is a relatively recent phenomenon, especially in the field of politics. (Brugha, et al., 2000, p. 239). Moreover, stakeholder analysis was adapted from organizational and management literature in the 1970s and 1980s, which separated the power and the role of interest groups in the decision-making and policy process. (Brugha, et al., 2000, p. 240) These days, stakeholder analysis is popular in planning and designing cities by use it in participation process between planners, local people and government.

This analysis gives an opportunity to look deeply into the stakeholder position in analyzing project area by generating knowledge about relevant actors so as to understand their behaviour, intentions, interrelations, agendas, interests, and the influence or resources they can bring to bear on the decision-making process. By categorizing each the stakeholders in different levels, it gives the opportunity to show importance highlights of actors and interest group’s position in the policy-making process. (Brugha, et al., 2000; Blair and Whitehead 1988; Fottler et al. 1989; Blair et al 1990). This strength of stakeholder analysis is the same the limitation which lies in its prospective dimension whereby it can be used to predict and provide information to influence the future. The other limitations are observation time when policy environment, the context of the analysis, stakeholders’ interest, positions, alliances and influence are subject to change. It happens if the time frame of prospective analysis is too long or study results aren’t applied in a relatively short period. Therefore, the political context of policy-making is unstable and can be subject to sudden, unexpected transformations. The cultural contexts in stakeholder analysis can limit its usefulness if the respondents are not familiar with this approach. The last limited is connected with the analyst critical position in interpreting the responses of actors, by the understanding and ability of the analysts, and, therefore, their judicious use of such tools. (Brugha, et al., 2000, p. 244-245)

Stakeholder analyses have done by interviewing the community chairmen and monitors because the limitation of time and small number of inhabitants in the study are, it chooses to take interview from those people. Moreover, in Lithuania, people aren’t open for strangers yet. In the study research, it was done by interview seven people who are:

Vytautas Ankudavičius – block-flats Užupio st. 2, 4, 6, 8 owners of community chairman,
Gintaras Labutis – Paupio sub-eldership monitor,
Jolanta Digrienė – Paplauja community monitor,
Lukas Revinskas – master architecture student in Art Academy; inhabitant of Paplauja area,
Audronė Alužienė – project manager of “Park of Architecture” and professional planner,
Audrys Karalius - architect, theorist in architecture and urban,
Algis Vyšniūnas – architect, professor, theorist in architecture and urban.

2.1.2 Case study

These days, case studies have been used in various fields of professions including medicine, law, engineering, business, planning, and architecture. Fields such as sociology, economics, and psychology use case as a research method. This case is common in urban design, analysis and academic world of planners by giving opportunity for planners and designers to gather information about project field and solve problems. Research in architecture, planning and urban design often rely on a case study approach, be it a historical, social, or policy-oriented examination. Case studies observe most of the time the general or purely anecdotal information about projects and concepts worthy of replication. At the same time, a case study can be a well-documented and systematic examination of the process, decision-making and outcomes of the project, which undertaken for the purpose of informing future practice, policy, theory, and/or education. (Francis, 2001, p.15-16)

In professional practice, case study is used as a source of practical information on potential solutions to difficult problems and for education as a teaching tool by using examples, to learn problems-solving skills, and to develop useful evaluation strategies. In the design and planning fields, professionals are typically used to describe and/or evaluate a project or process. Case studies can describe exemplary projects that demonstrate exceptional work, or they can also be conducted on more typical projects, which may be easier to replicate. As it mentioned before, the case study is various fields, for example, the case study method is a core part of the curricula in medicine, law and engineering. Schools of Business, Law and Medicine all routinely use case studies to train their student in Harvard. It helps to practitioners and students to manage critical situations and handle in practice by challenging to be effective problem solvers and to devise solutions to common situations encountered in practice. (Francis, 2001, p.16)

Case studies can often answer the big questions at the intersection of policy and design. They’re are useful in participatory design and of studies trying to refine or test emerging concepts and idea, the same as will be use in this thesis. Case studies help to understand the aspects of projects unique by giving context by identifying the principles in similar projects. There can be used in design process of moving from identifying problems to creating solutions. Findings from case studies on the people’s behaviour in public places can help to predict activities in similar projects. (Francis, 2001)

The case studies have clear limitations in practice use. One of the limitations problems is comparing different data which was collected in the analysis process, therefore, can be not equal between each other. Other the limitations of the case studies are an evaluation of analysing projects because of the project designers, owners and manager don’t share all information about problems with their project, also, some projects can be better evaluated after a few years or decades. Some of the case studies show not only the successful development even the failures. However, the participants learn much more from failures, but in professionals aren’t eager to have this aspect of their project highlighted. At the same moment, there aren’t enough different case studies in various projects, because most of the studies have done on the same popular and the most successful project in the world. What is why, this is a need of modest, everyday landscapes case studies. Existing methods need to more systematic, rigorous and tested in a wider variety of settings. (Francis, 2001)
The paper is about the participation process in brownfield, when include the community and neighborhood in the development process. The literature review is looking through the theoretical part about the participation process by two theorists Lucien Kroll and Christopher Alexander and city development process. It reviews two main historical developments in the city industrial and post-industrial and introduces the urban development before and after independence of Lithuania. The last part, a regeneration process “with people and by the people” reviews two cities (Hamburg, Germany, Gdansk, Poland) industrial territories regeneration process which has been done by including community. This part helps to understand the reality of the movement. All these reviews help to understand the stakeholder analysis and a case study area, because it explains the existing situation development.

3.1 Theory

Participation process has long historical development as an approach in the planning process which germ started after The Second World War, when demolish areas needed to rebuild and living quality needed to be improved in Europe and United States. During the 1960s and 1970s, there was a new form of designing, planning, include social planning, community-based planning, participatory architecture, process architecture, open architecture, advocacy planning, self-building sweat-equality, and cohousing which have been influenced by early initiatives Patrick Geddes(1910s), Frank Lloyd Wright (1930s) (Ellin, 2000, p. 182). These movements happen because big massive application in transportation, information, production, and building technologies after The Second World War, which let the architects and designer don’t ask clients the opinion of their request but create what it would be better and faster to create by them. (Ellin, 2000)

The strong influence has been done in a participatory process by Arnstein’s (1969) ladder of participation, where describe the participation types in the planning process. The ladder of participation suggests that the true engagement only be archived when there is an effective partnership working that encourages delegated power (to local residents) and where there is a sense of (local) control over the design and management of regeneration programmes (Woolrych et al., 2013, p. 225). Moreover, the power redistribution by participation process, assist citizens to be involved in the political and economic process, to be deliberately included in the future. (Figure nr.18) The poster highlights the fundamental point that participation without redistribution of power is an empty and frustrating process for the powerless. (Arnstein, 1969, p. 216) It allows the power-holders to claim that all sides were considered, but makes it possible for only some of those sides to benefit. (Arnstein, 1969, p. 216) Looking further, it needs to understand the power in planning by resident, the theory review the practitioners’ views about participation process.

In this paper, the theory will be applying the participation approach by using two famous architects and theorists - Lucien Kroll and Christopher Alexander, methods for working with stakeholders and designing the project area. Lucien Kroll is known by his working with people in the planning process in different scale projects and his strong opinion about typical planners and architects. His theoretical view about participation is very strong and his experience in using in practice. Lucien Kroll theory about participation could give to this paper base theory use and critical view about using the participation movement in the revitalization process in brownfield.

“A Patter language” is the book as the author, architect Christopher Alexander describes as a guide who helps for planner and architects to create design/ planning
pattern for their projects. This book is not only for professionals but even ordinary people can use it for creating the plans and design in their area or home. This book has been used as the pattern not by architect and planners but even software engineers, computer science patterns, human computer interaction patterns, documents expertise in diverse fields and education patterns. The language description – vocabulary – is a collection of names, described solutions to problems in the field of interest (Pattern language 2014). Christopher Alexander and his college’ written pattern help to create a new language for participation looking through the person and person’s position inside and outside of the city.

3.1.1 Participation process by Lucien Kroll

Lucien Kroll is Belgium architect, who have developed an approach where architects and planners work together with communities. Kroll is one of those architects who started working with city and town planning in the twentieth century with a strong philosophy that professionals, government cannot take all power for developing city, towns without community assist in the process. For the last half century, Kroll contends, architects’ models have been the taylorized factory and military, with an eye toward efficiency and a clear hierarchy of functions. Kroll rejects these models because they place architects’ desires to express themselves artistically and to impress colleagues over satisfaction (Ellin, 2000, p. 178). His method has called utopia because nobodies believed that this approach could work in occupied by architects and planners society. It was a new idea in the rebuilding and regenerating city society in the XX century. As Kroll (1980) wrote, “we have never imagined that we could bring out revolution with pockets of the alternative architecture, which to make a revolutionary impact, would have to infiltrate the existing constraints”. Nobody understood it that moment that this planning system will change, particularly in regeneration and renewal project where community opinion will be the main key for developing areas or even a small part in the area.

Kroll provides as the architect approach of utopian thinking that might influence the production of urban spaces. (Harvey, 2000) Lucien Kroll looks into urban space through the everyday lives of the human population and calls himself as a Situationist who ‘works in a non-hierarchical manner, addressing corners as they are identified, rather that assigning priorities to issues’. He suggests that the configuration of urban spaces must adapt to meet the changing needs of dynamic populations and recognizes that design is an integral part of the process of human habitation that should involve all urban dwellers. (Milgrom, 2002) Kroll believes that the attainment of an architecture of complexity through participatory design will provide the inhabitants with “instant history”, with a feeling of being rooted in place (“entercine”), with a home that pleases them and which they can easily transform according to their evolving needs, tastes and financial recourses. (Ellin, 2000, p. 179). The public space is used by the community and their opinion should be heard in the developing process of the site. Participation process could take small areas and give vital social space. For developing the social spaces, Lucien Kroll suggests two ways: single, predetermined objective and making social places, which practically exist in planning the process. (Ellin, 2000, p. 179) First, it recognizes the leading person or group of people whose have the task, it is to conceive, organize and produce, and control people who can be manipulated. The second way is creating livable space with flexible and minimal environment which prefer what it is essential: ‘living relationships and activities that spring from diversity, unexpected initiatives, and above all, that something in social man that leads to the creation of community.(Kroll, 1984;Ellin, 2000, p. 179)

As a planner, Kroll (1991) works and talks about planning public places which most use by communities by criticizing the architect development of public spaces which have been defined either mechanically or subjectively by the scale of the neighbourhood. Most designers take cliché approach and take it as made possibility for creating a space. So it often appears tamed by its aesthetics, descending from the antique genre, from the surrealism of a Chirico or Fritz Lang or from the cinematic medievalism of Disneyland, it was always remaining mercenary and imposes a rigid behaviour on its residents (Kroll, 1991, p. 331) Public spaces can lose identity when public space hasn’t been recognized by public and grow out of its own disorder.(Kroll, 1991) Kroll (1991) suggests for designers stopped drawing hard geometrical space in the landscape and looked back when cities have
developed considering in landscape and nature. Moreover, it isn’t his nostalgia or populism, but the offer that first needs to enliven and enrich the creation of public spaces then launch them into the process of a continuous approach. These means are manifold: true participants, or those simulating the process, bring a richness of intention that is not available from designers alone or those designated as responsible for the design process. (Kroll, 1991, p. 332) If, in a participatory process, no one participates, there is still a possibility that the designer looks more deeply into the meaning of the area and try to avoid the typical designing approach. It leads into that people still have the possibility to imagine new things, and designers have a chance to hear ideas later by creating it or interpreting as the key for design. (Kroll, 1991) In one of his articles “Can architecture be taught?” Kroll (1981, p. 38) describes his experience in the teaching, where he has been working with his student in some community project by using participation approach. He gives advice how to connect with participants for students.

Let’s get away from inevitable “mute residents and deaf town-planners.” Let’s question them, listen to them (this isn’t so simple), translate into comprehensible designs and scheme what they say (and not what we would like them to say). Let's make sure that we have understood each other. Let's move forward, etc.

As mentioned before, Kroll gives simple suggestion for future planners and architects how to connect with participants the same idea as the designer and planners. This suggestion is a tool for building understanding between both sides which give the opportunity to build new design and plan.

The participation approach of Lucien Kroll has been criticized by other authors by saying that his method doesn’t always work and even he as the architect take the same decisions as those architects he so vehemently criticizes. (Ellin, 2000) In his role as an architect, he explains that he wishes to avoid these taylorizing and colonializing influences through his participatory approach. (Ellin, 2000, p. 181) Kroll particular version of participation has some difficulties which could be realized in practice, and sometimes this approach lets repeat the same mistakes in a housing development project without instead looking for other alternatives possibilities. It happens because most of the participants asking for designs which are very familiar with their lifestyle or design which they’re like it/imagine. (Ellin, 2000) At the same moment, those architects who are familiar with the same ideology as Lucien Kroll, with their optimism and idealism can’t distinguish the failure in project. (Ellin, 2000) If alternative modes of architectural production are simply dismissed when they fail, rather that carefully evaluated with an eye toward future success, some of the most creative architects and urban designers may be discouraged from exercising their originality and lulled into complacency, conforming or surrendering to the situation that is less than satisfactory but that they resign themselves to perpetuating (Ellin, 2000, p. 182).

At last, the Kroll is perhaps best known by his approach in participation design and working with communities, but as a theorist and practicer Kroll understands that to use full participation approach, “we as people” need to improve knowledge before giving the voice to all users especially in this society. (Milgrom, 2002) This process needs time and patience when individuals, government and professionals learn to develop the city together by taking small steps in participatory processes.

3.1.2 Christopher Alexander and “A Pattern language “

Christopher Alexander is Austrian mathematician, architect, theorist, professor in the Department of Architecture at The University of California, Berkeley, fellow of the American Academy of Art and Science. He was awarded by a first medal for research ever awarded by the American Institute of Architects. At the same moment, Alexander is an architect, a scientist and a builder who have built in many countries. (Revedin, 2014; The Nature of Order, 2014). Christopher Alexander with his colleagues wrote several famous architectural books like “Notes on the Synthesis of Form” (1964), “A Pattern Language: Town, Buildings Construction” (1973), “The Timeless Way of Building” (1979), set of books “The Nature of Order” (2002-2005). His theory and books have been criticized by other architects and professionals of his different thinking about the space and people, connection between them. The critiques of the pattern language have been varied and have
pointed to its essentialism, its reduction of the design process into a diagrammatic language and its emphasis on comfort, ease, and pleasure, which many critics see as bourgeois and encouraging of complacency. (Bhatt, 2010, p. 711) Alexander (2008) thinks that today people have been living rude developed urban environment which methods “have given the impression of capacity to create our built environment” for the last fifty years. So he believes that this moment we are coming in the new urban development era “in which the delicacy of this operation and the delicacy of the procedures we must use to do it are first becoming visible and practicable”. (Alexander, et al., 2008, p. 16) Moreover, Alexander is one of those architects from architecture culture of the 1960s and 1970s who criticized the modernism. It is necessary to mention that one of them was Jane Jacobs with his publication The Death and Life of Great American Cities (1961) which encourage giving planning and spaces for grassroots at local levels. Her publication talks about the renewal development which damage the neighbourhoods in the USA, in the 1950s and 1960s. (Bhatt, 2010, p. 712)

Revedin (2014) introduces Christopher Alexander book “Notes on the Synthesis of Form” “as an approach to systemic collective design”. The book, however, was received as a revolutionary attack on the formalist design methodology of the time. Owing much to the findings of Freud, C.G. Jung and Lacan, Alexander’s research was the starting point in his creation of a “pattern language” methodology which could be easily understood and empowered anyone to design and build at any scale (Revedin, 2014, p. 10-11). Christopher Alexander developed a new unfettered design movement which connects and finds a link between context and form which it is the mental level of abstraction in “Notes on the Synthesis of Form”. He then moved on to a third possible link between the context and form of introducing a third “set-level”, that connects the actual world and the mental picture thereof via what he calls “a formal picture of the mental picture”. (Revedin, 2014, p. 10-11) The new design approach lets analyses more critically mentally based position than “mathematically” set analysis, moreover, the new design solution is reintroduced to user “that reflect and enhance feelings rather than facts”. (Revedin, 2014, p. 10-11) New design movement can be called the unselfconscious process by Christopher Alexander. In “Notes on the Synthesis of Form” 1964 author talks about this new process:

In the unselfconscious process there is no possibility of misconstructing the situation: nobody makes a picture of the context, so the picture cannot be wrong. But the self-conscious designer works entirely from the picture in his mind, and this picture is almost always wrong. The way to improve this is to make a further abstract picture of our first picture of the problem, which retains only its abstract structural features. The third level can be reached through a set of things or reactions

Revedin (2014, p. 10-11) suggested that Alexander went on to develop this idea of a third “set level in this wider participatory theory, linking “the timeless way of building in which man feels at home” with the feelings we nourish towards “buildings which are themselves as ancient in their form as the trees and hills and as our faces”. Moreover, Alexander theory is characterized by the link between users and the process of design which doesn’t require a professional knowledge from a person. Alexander theory, diagrams and comprehensive descriptions, let the planner, designer even ordinary people to look from the user position (Bhatt, 2010). (Figure nr.19)

“A Pattern Language” one of the Christopher Alexander publications which in-
clude the realisation of his and his followers’ works in one place by 253 patterns – participatory projects from different parts of the world. (Revedin, 2014, p. 10-11) The book defines a set of fundamentals for building and planning urban and architectural projects that can be used by non-expert designers. (Steenson, 2009, p. 20) For professionals of many disciplines, this book is a tool which guides to identify the main design problems and gives an explanation how the rules could apply, building and public space position in the site. Since the appearance of A Pattern Language in the late 1970s, Alexander and his colleagues have been engaging in a long series of experimental projects, all designed to deliver communities and neighbourhoods that are more “real” – that is to say, more focused on the human aspects of social and social structure, and how real people actually feel about their environment – and endeavouring to produce a built environment that truly makes people happy in their day-to-day lives (Alexander et al., 2008, p. 20). Alexander (1977) explained that each pattern describes a problem which occurs over and over again in our environment and then describes the core of the solution to the problem, in such a way that you can use this solution a million times over, without ever doing it the same way twice. For each pattern, the author introduces the problem explains the problem and finally gives the design solution. Alexander used different authors and projects publication to explain every pattern problem, for example, medical researchers, poem and songs. The design solution is not the fix tool, but it use as reference how it can develop the design. He explained the design by hand drawn diagrams and pictures of the existing designs, projects.

Alexander explains different social people’ groups’ needs, but don’t divide them into the separated groups in the design solution. He suggests that every social group (children, adolescents, adults and old people) and different subcultures should be together or close to each other. People can’t be divided and isolated from each other, because they need each other for connection, communication and giving the vital movement in the community. He suggests that those groups have to have their own small spaces where they could meet and be protected from traffic, noise and pollution. For example, “57. Children in the city”, “65. Birth places”, “68. Connected play,” the author talks about children’s position in the city, neighbourhoods and their connection with other children, their parents in the first hours, days. The author criticizes the modern world that it isolates the child from other children by keeping children inside of the building or private site, by giving medical results and philosophical thought about it. Patterns about the child are developed together with other patterns of social groups, traffic and buildings in the book. Alexander always gives the position of the person in the pattern. Moreover, he comes back in several patterns in the medieval centuries with some good examples which have been forgotten or abandoned in the modern world. According to Alexander, the rise of modern aesthetic and a specialised architectural profession had contributed to the failure of the modern architecture to relate to a deep psychological need of users. (Bhatt, 2010, p. 712)

Revedin (2014 p. 10-11) explained that the book includes all necessary surveying and structural calculations, and a novel, simplified building system that copes with regional shortages of wood and steel, uses easily-stored inexpensive materials and produces long-lasting buildings with small amounts of materials, design and labour. Alexander (1977, p. xiii) calls A Pattern Language as a fundamental view of the world. “It says that when you build a thing you cannot merely build that thing in isolation, but must also repair the world around it, and within it, so that the larger world at that one place becomes more coherent, and more whole; and the thing which you make takes its place in the web of nature, as you make it”. (Alexander et al., 1977, p. xiii) The book explains the every small detail from a global position until there to put the bed in the room. In one of Alexander publications, he says “...you cannot change the soul of a person by putting lipstick, nor can you do this with architecture” and talks about creating a better place for living by “you cannot make the world a better place to live in by changing the style of the buildings”. (Alexander, et al.,2008, p. 18). Moreover, the patterns should help planner, designer and inhabitant to understand and developed new and already built area for “better place to live” not only by developing new building, but also developed surrounding and connected with neighbourhoods. To create a livable place it needs to respect three things: “the land, the people and the communal spirit that is felt”. (Alexander, et al., 2008) According Alexander (2008, p.18) “the social life of neighbourhood comes about from the existence of profound, articulate public structure in the place, which bestows community, on the people who live
there”. Moreover, he talks in “A Pattern Language” and other publications that even neighbourhood has been developed “without community and real people as clients”, the developers should create a project and see as “human endeavour, not as technical endeavour” and introduce, discuss with each person of this community that territory should be given “back to community, the well-being that they have received from it”. (Alexander, et al., 2008)

“A Pattern Language” and “The Timeless Way of Building” books’ methodology has been used and adopted by the University of Oregon project where was built community with several few floor buildings. In this paper, different patterns will be used to design the study area and to combine with stakeholder analysis discoveries – people opinion and needs.

Taking the next step after participation approach, it needs to look to the city as a human and understand how it grows up, what kind of impact influences the city structure, in these days picture. Writing about the city is like to hear the life story of the person when all details and stories will be placed in the bibliography. The bigger cities in Europe have a long history and have been growing for several centuries and decades. Different architecture styles and wars influence most of the cities’ structure. In this part of the paper, it will review city development (creating sustainable cities and conversion process) and two the biggest influence of the city structure: industrial city and post-industrial city, and Vilnius city of today before and after independence.

These days, city development looks easier to do it comparing with few centuries ago because of the new building and constructing technologies, therefore, even small area in the city takes time to plan, starting from blueprint until if finally handed over to the owner. A creative city is one of the problems that have no choice, but to deal with, which means being innovative. The innovators often come from outside, often being migrants who in the face to the hostility of marginalization they encounter have no other option than developing perspective on their own. So as these cities under pressure typically are not the centres of culture, finance and power of their time, but more or less the outsiders among them, it can be said that innovation springs from the outsiders in cities who themselves are outsiders. (Hall, 2002, p. 35) At the last decades, some of the cities are losing the identity by copying each other or developing similar projects. However, there are still cities which are using the own recourses (local identity, social and cultural capital, administrative networks, economic factors, the quality of the body of public servants, the housing stock and etc.) which keep the identity and at the same time, developing them in order to improve their position in the midst of other cities.

Government and professionals’ organization impact has been noticing in the social process, physical and economic development, but even involve individuals in the process. (Fotuin, et al., 2012) A planned government-guided innovation would not appear to be the most promising approach: “it seems likely that bottom-up, small-scale, networked innovation will always be necessary for really fundamental eco-
nomic change’ (Hall 2002, p.36). The city isn’t homogeneous, but made from various networks which influence the city developments, comprising countless actors inside and outside the city boundaries. It would be naive to think that a single actor or single strategy is equally ‘save’ and develop the city on its own. (Fotuin, et al., 2012) Cities have the capability of providing something for everyone, only because, and only when they are created by everyone. (Jacobs, 1992, p. 238) In the half of the century, in the fields of design, it was trying to develop sustainable cities by solving the physical and ecological problems. New urban configuration promote physical health by providing access to light and clear air and by preserving the ecological processes that support human life. “Green Cities” and “sustainable communities” have been developed in the 1960s and 1970s when designers’ development the theory about importance of ecological processes and the impacts those urban forms have on the environments. Green city advocates have laudably made proposals for more environmentally benign technologies support urban life. However, while addressing issues of biodiversity, they have not addressed the social diversity of cities. So realized examples of sustainable communities- built neighbourhoods and “Eco-villages” - remain accessible only to those with the capital to buy into the vision. (Milgrom, 2002)

Another significant developed movement in the cities is the conversion process, than industrial areas are converted as residential or commercial use. One of conversion biggest influence development movement is lofts which came from the United States and Western Europe cities at the beginning of the 1970s, when abandonment industries in the downtown first have been occupied by artist people and later by middle class people. It is in America that loft living has most influenced the urban housing market, for it is American cities that have been more sensitive to the flight and return of middle-class residents and investment capital. (Zukin, 1989, p. 1) Zukin (1989, p 3) said that the residential conversion of manufacturing lofts confirms and symbolizes the death of urban manufacturing centre. In Vilnius city as it was explained above, have powerful process. As explanation Zukin (1989) writes that developer and city officials develop the loft market because it can be done without residents, neighbourhood approval. Moreover, she suggests that this have two parts. First, if the conversion of manufacturing lofts to residential use does not cost cities a loss of tax revenue, or federal government an outlay of construction funds, then loft living represents an antidote to the state’s fiscal crisis. Second, if loft living generates a middle-class return to the urban center, than the city reaps a benefit – a social and fiscal payoff – from loft livings’ demographic and cultural effects. (Zukin, 1989, p.3) Loft movement in Vilnius and other cities have familial position, but all of those lost the begging symbol of loft and created only as residential buildings and areas.

3.2.1 Industrial city and post-industrial city.

Industrialization and post-industrialization process have a significant impact on city structure these days. There are a number of cities in Europe which have been known as industrial cities as Manchester, Liverpool in United Kingdom, Hamburg, Germany, etc., including some cities in Lithuania – Vilnius, Kaunas, Klaipeda. Industrialization and post-industrialization processes influence the cities because of the political and economic position in counties.

Industrialization process in the cities and towns came with dramatic changes - industrial revolution 1760-1840, when the old economic order was ‘suddenly broke to pieces by the mighty blows of the steam engine and the power loom. (Gregory et al. 2009; Toynbee, 1884) In certain Western societies, industrialization took place spontaneously, small-scale domestic production for local consumption being replaced by large-scale ‘factory’ production aimed at more distant markets. (Gregory et al. 2009, p. 380) It started in Great Britain later spread up by taking cities in Western Europe and North America in the nineteenth century. (Gregory et al. 2009) By industrialization process the city economy created new roles of networks, for example, people, credit, information and towns, and especially the integration in regional economic. Towns grew up both in number and size, with those in the industrializing districts experiencing the rapidest expansions. The causes were bad living conditions in many towns, the construction of the houses and physical and social problems. (Gregory et al. 2009, p. 379)

Post-industrial process took a pattern of land and social areas in classic forms of
the industrial city. (Gregory et al. 2009, p. 565) Towns and cities old towns’ structure and skyline have been marked by new investments in office towers, public institutions, art and sports complexes, and restaurant and leisure services. The brownfield sites of old industrial and transportation land use around downtown have given way to waterfront redevelopment of condominium and public leisure spaces, often the result of public-private partnerships. Inner-city surroundings were experiencing the reinvestment and gentrification processes as living places and other economically marked development. One of the elements which are appropriate to post-industrial city, is the population and land use features. Population grown in this period associate with middle-class grow up which influence the housing affordability – urban sprawl, and a number of private cars by creating countless constructions of roads and bridges in cities and even country sides. (Gregory et al. 2009, p. 565)

Before the mid-19th century, agriculture had been a main economy in Lithuania. There is nearly 90 percent of the population worked in the agriculture sector until the 20th century. Industries were distilling liquor and tiny manufactories employing skilled craftsmen until the 18th century. (Sužiedelis, S. 2011) In Lithuania, industry came with new transportation possibilities. Some changes and economic revivals took place in the town, industrial development (first part of the 19th century- beginning of the 20th century), especially after linking the more important towns by rail lines and with centers in other countries (Daunora et al. 2006, p. 78) In the first occupation of Russia, industry grows up faster concentrated in railroad construction, wood processing, metalwork connected with the invader. In the first restoration of independence, in 1918, industry grows up by producing including cellulose and paper products, later industrialisation expanded by taking old and new industries (food processing, wood processing, textile and leader, power stations. In this period, it was formed industry architecture which are remain until these days, and towns’ plan had been developed by giving the waterfront’s (port area in Klaipeda), territories next to the main axes, railroads for manufactories (Vilnius, Kaunas). In the Second World War period, the industry was concentrated in the weapons’ production as most of the Europe. In second occupation period, special emphasis was placed on the development of heavy industry, such as chemicals and metallurgy, while energy was enhanced by huge power plants: a fuel-based new complex in Elektėnai just outside Vilnius and the enormous Ignalina nuclear power plant of the Chernobyl type in the north-eastern corner of the country. In this period, new cities were built, for example, Ignalina, Naujoji Akmene, which were created as living area for labours of the manufactories next to the towns. Moreover, the industry was concentrated to the Soviet Union economy rather than local needs, environmental damage became a serious issue of the 1980s. (Sužiedelis, S. 2011, p. 131-134) These days, the industry is focusing on a new marketing system by keeping continue successfully old manufactories and involving new ones in the economy and city structure. Some old manufactories were abandoned because the production was useless, and left the brownfields, some of the territories resigned by new industries, commercial and even residential buildings.

3.2.2 Post-soviet Union country development before and after

After independence (1990) together with neighbouring countries, Lithuania was retrieved lost in pre-war position, in identity and restore the economy and the connection with the world. The transition period, which lasted longer than a decade, was characterized by political, social and economic reconstruction, while urban spatial problems were displaced into the second schedule of state tasks. (Daunora et al. 2006, p. 77) Looking to these day’s city structures, there are understandable that the big influence gave the occupation period in the last hundred years. As other cities in Europe, Vilnius was developed and impacted by different urban planning systems before and after country independence. In this part, the paper reviews the urban impacts in the country and city urban development before and after the Soviet Union.

Before. In occupation time, urban system in cities of Lithuania felt different influence in planning systems main generated by central government. The socialist model of housing development and urban planning the centralized planned economic system and the non-existence of (urban) land markets are the most important features that have shaped a distinctive structure of socialist societies, significantly different from capitalist cities in Western Europe. The system left imprints
in the city structure by large housing estates in the peripheries of downtown and deteriorating historic buildings inside of inner-city. (Pichler-Milaković et al. 2007, p. 102)

One of the most important city functions was to be the provision of social and industrial services to the network of surrounding small settlements to expand its economic and cultural potential. (Daunora et al. 2006, p. 79) The first urban system was polycentric where weren’t powerful centres, so it was decided to develop middle-size and small towns by giving new functions. Decentralization process left big result in Lithuania comparing with other countries where this method development principle was used. (Daunora et al. 2006) The urban planning and functions were concentrated more with a common interest and the economy of the country. The country was urbanized in 40 year period (1950-1990) (Daunora et al. 2006) Result of the special planning scheme were especially visible from 1970-1990, i.e. from the epoch when the urbanisation process (1990), when the proportion of urban and rural populations stopped changing. During this period the growth rate of the two biggest Lithuania cities (Vilnius and Kaunas), compared to the national average, was successfully reduced by 11 per cent, and the growth rate in 16 middle-sized towns was even increased by 36 per cent (Daunora et al. 2006, p. 80)

Concentration and decentralisation process created environmental and urban problems, which, were connected with centralized command management disregard ‘local’ interests. Therefore, it was difficult to avoid the construction of inorganic, very large and ecologically dangerous enterprises that only aimed to tighten economic and demographic links between Lithuania and the USSR. For that reason, the officially accepted strategy for small town development was even more important because it stopped the growth of the biggest cities and decreased the associated ecological and national problems, helping to avoid the depopulation in the periphery zones and consolidating the role of the new centers (at first Utena, Alytus, Tauragė) in the national territorial structure. (Daunora et al. 2006, p. 80) The last occupation has deeply changed towns and city’s position in the country contests and later affect some of the cities and town’s development.

After independence, urbanization process in the country change by concentrating development of biggest cities – Vilnius, Kaunas, Klaipeda, Siauliai as the economic, education, connection with inside and outside of the country and demographic potentials. At present, maintaining both the proportions and specifications of the urban zones and rural areas (agriculture land, forests and other territories) has become an important condition for sustainable structures. By EU support, it opens new prospects for developing rural areas for tourism, and protection of nature and ecological agriculture movement in the county. (Daunora et al. 2006) Some towns and villages are developing as leisure and tourist centres in the country contests even regionally.

In the last decades, the country was influenced by integration and globalization process. This process touches many spheres, but especially big influence has to the condition of counties, towns, townships and villages, their demographics, urbanity, architecture and landscape that in some scale gradually looses their visual aesthetic identity and singularity. (Liucijus 2013) The demographic situation is declining even more due to increasing migration of the younger population into more developed countries. (Daunora et al. 2006, p. 82) Mentioned analysis showed that, during 2001-2011, number of country residents decreased by 440,37 thousands or 12,64 percent. In such way, during this period decreased number of towns (was 106, now – 103), number of villages (were 19842, now – 19004), and number of individual farms (were 19842, now – 19004), and number of individual farms (were 19842, now – 19004). Also, from the current number of villages or individual farms, about 18 percent of villages and 52 percent of individual farms don’t have residents and are near to the limit of disappearance. (Liucijus 2013) The demographic and urban changes influenced the density of population in cities, towns and villages, even landscape and identity of the country. Considering to Vilnius situation, demographic changes are notable too, by number of coming new students every year in universities and colleges, transportation density and other. Looking forward, the design part of this paper needs to be considered about demographic changes.

Like most European countries, Lithuania didn’t elude urban sprawl process in the county, and it still is processing. The processes of urban sprawl are very heterogeneous across Europe, much more than in the US, which roots in the diverse history
and culture of European nations and call for the European perspective on sprawl. A definition based on land use tend to associate sprawl with spatial segregation of land uses, with the extensive mono-functional use of land for single-family residential development, free-standing shopping malls, industrial or office parks and large recreational areas (e.g. golf, courses, theme parks). (Pichler-Milaković et al. 2007, p. 102)

Suburbanization started before independence in 1985 by trying to create and coping capitalist countries. Urban sprawl in Vilnius as in others Central and Eastern European cities are the results of the transformation of the country (privatization, restitution, decentralization, individual choices) and internationalization in the global processes of copying Western lifestyle especially American values and way of life. City transformation is mostly notable associated with de-industrialization, commercialization of the historic core, revitalization of some inner-city areas, and residential and commercial suburbanization in the outer city (Pichler-Milaković et al. 2007). After the fall of the communism, the transition to a capitalist economy meant developing services and the regression of the industrial activities (Andrusz et al. 1996). Thus, the cities went through a long process of de-industrialization and industrial restructuring which usually occurred through two other processes: decentralization and industrial relocation (Cepoiu 2009). Industry has been moved out of the inner-city areas to greenfield locations next to motorway junctions next to the city periphery. The old industrial and warehouses territories were released to the other owners who created commercial and residential areas, and some of territories abandonment and waiting for new investment. Those brownfields in the inner-city have a big potential land resource in the future. (Pichler-Milaković et al. 2007)

3.3.1 Regeneration project by participation process in Hamburg City

Hamburg City is notable as the port city of Germany, where waterfront regeneration process started in 1980 with one project promotions after one. Residents have strong influence and position in the developing process, therefore, project has experience in participation process. Waterfront regeneration projects pose particular challenges due, among other things, to the strategic importance that their development can often have for the city or the region as a whole; the large stakeholders that often own land and other assets in the affected areas (such as ports, railways, industry, etc.); and the variety of scenarios in terms of the resident population, ranging from the total or partial absence of local residents, to resident port-related workforces who may feel threatened and displaced by regeneration proposals. (Smith, H., Ferrari, et al. 2012, p. 95)

Two projects will be reviewed in this paper in Hamburg City. “HafenCity” is high successful regeneration project in the city which area is next to the city centre and having no existing residents who could be part of this project. City government took the main leader position because they owned the land and dominated in the project process with small consultation with the public. Projects have been going by public development company. Opposite, “Leap across the Elbe” project has been done where residents of the area have been influential in the residential area with a variety of inhabitants. This project is still processing, and the public dialogue established at the workshop and through other on-going for a field in

Regeneration and revitalization projects are going all across of Europe, including small areas until city districts, and this urban development is becoming usual process in planning the cities and towns. Paper is looking in two cities experience in the regeneration process, projects and analyzing what kind of the problem projects undertook contorted. Hamburg, Germany and Gdansk, Poland were chosen as examples because of regeneration projects also to compare practices in the Western and Eastern parts of Europe, especially in Poland because historically and politically Lithuania has the long connection. Maybe their practice could give good advices in developing brownfield in Vilnius.
the Convention for the International Building Exhibition IBA 2013. (Smith, et al. 2012)

HafenCity. The old port area 157 ha of land developed close to the city center, and it was separated from the northern branch on the River Elbe. The area was surrounded by other industries and brownfields, and had good access to the commercial city center of Hamburg. (Smith, et al. 2012) (Figure nr.20, Figure nr.21) HafenCity project main position was to connect it city centre by expansion process by increasing the city territory 40%. (HagenCity Hamburg, 2010) The overall aim of the city was to generate a dense, mixed-use economically attractive extension of the inner city and contribute to the positioning of Hamburg on the map internationally. HafenCity project is a strategic development not only the city, but even all Germany and Europe which impact economic development. (Smith, et al. 2012)

Blueprint of the project was approved in 2000 in city Senate, after 10 years developing the plan. The transformation of the harbour was planned after economic changes in the country and by looking differently to the inner city. Existing port was moved to a new terminal in Alternwerder by giving a new opportunity for city life in the harbour area. From the beginning, the city government authorities have a strong influence in the developing the HafenCity project. The first time the project was introduced to the public in 1997 by informing the inhabitants about a project which will connect the city center with waterfront. In 2000, master plan proposes the project as a long term development project, which should be finished until 2020. HafenCity also aimed to be the leading example of a new business, social, cultural, urban and economic image of the city in a 21st-century European context. However, the plan didn’t propose commercial facilities, main office building, but more emphasize on residential function in the area. (Smith, et al. 2012) The most of the project development time, the public was informed by expositions, big cultural events and temporary art installations, etc., but avoiding real communication with residents, also raising awareness. Design of public spaces has also been used as a tool contributing to the participation and integration of the wider citizenry of Hamburg in the area. (Smith, et al. 2012, p. 103)

After residents move in 2011, some changes have been done by territory inhabitants. New play-building has been developed by parents in the first neighbourhood area. By all residents and tenants of the HafenCity establish to decide the person who responsible for cooperation with, and the participation of, residents and other stakeholders in the area, and at the same time this person is employed by HafenCity Hamburg GmbH. In 2010, master plan was looking through again by fixing the development eastern neighbourhoods. Public presentations and discussions of the proposal were used to gather information which was used in further refining of the proposals. (Smith, et al. 2012, p. 103)
Leap across the Elbe is a project which is happening very close to HafenCity and inner–city, of regeneration in the island of Wilhelmsburg, and it was started in 2002. (Figure nr.22, Figure nr.23) The area consists of a patchwork of port-related, industrial, commercial, infrastructural and residential uses, including large-scale post-war social housing. (Smith, et al. 2012, p. 105) Residents of the area are port and industry workers, and large number of migrants who all are approximately 50000 inhabitants. 1960s social housing program failure and the westward movement of port activity made this area as one of the problematic areas within the Hamburg city. Wilhelmsburg Island has a good opportunity for new development which could involve physical, cultural social contrasts in the project. (Smith, et al. 2012) Leap across the Elbe proposed a range of interventions, including the development of inner-city wasteland and the upgrading of public spaces, social infrastructure and educational institutions, especially in deprived areas. (EIB, 2009) The project objective area to adopt investment-related measures with reference to labour market and employment; create the infrastructure needed to develop local economies; and increase the attractiveness of local district centres. (EIB, 2009; Smith, et al. 2012, p. 105)

The Leap across the Elbe initiative emphasizes the opening up and developing of the old harbour, including areas dedicated to port activities and Elbe Island. (Smith, et al. 2012, p. 107) Moreover, development project includes and urban planning by creating various strategies for the area. Participation strategy has done big influence in developing area, especially solving with a high level of unemployment, poverty and crime. (Smith, et al. 2012) As part of participatory mechanisms, a series of regular meetings between the local administration and stakeholders was held in order to identify relevant problems and to address questions. These meetings included researchers, practitioners and end users, allowing for continuous professional communication and cooperation, and helping to build up trust-based relationships in order to underpin the mutual translation of different logic and languages across actors involved in the projects (Waterfront Communities Project, 2007; Smith, et al. 2012, p. 108)

In project process, a permanent ‘participation council’ was appointed by IBA Hamburg and compose by 24 citizens and 7 political representatives from the area. ‘Participation council’ has given opportunity for months’ meetings and possibility public participation.. At the same time, there were organized large-scale forums for residents, workshops together with professionals and citizens on top topics for developing projects. All this created partnership between residents of the island, government and professionals for present and future. The project is confronted with problems which have been raised by residents and most all of them were about temporary inconvenience because of the dislocation, lack of success in mak-
ing local facilities available in the construction period. (Smith, et al. 2012)

3.3.2 Regeneration project in Gdansk, Poland

As the biggest neighbourhood, country, Poland and Lithuania have the long history and political connection together. Many cities and towns have been developed parallel only the measure was always different. Before both countries got independent, the urban planning systems were used to being the same - central government. These days both countries are dealing with regeneration processes and revitalization of inner-city, brownfields and even military abandoned areas. In Poland, there are going new developments in big cities, which developing greenfield, revitalization of historic cores and improving infrastructure system (Bradecki et al. 2010). Joining the EU and the possibility of acquiring funding targeted for urban development and regeneration projects has changed the situation, the currently the policy of many local authorities- especially medium sized cities and towns – are much more rational and spatial planning-oriented (Bradecki et al. 2010, p. 6). Local authorities compete for EU funds to secure resources for their revitalization plans (Sagan et al., 2012,p. 1140). Nevertheless, post-socialist urban development policies are often focused on conspicuous large-scale projects aimed at attracting new investment and high-income groups rather than stabilizing the existing socio-economic mix of residents (Sagan et al., 2012,p. 1140). The most successful projects have been done by combining different existing factors: connection with the city, participation with residents, existing area structure, heritage and historical value and other factors which helped to planners to develop the territories. (Bradecki, et al. 2010)

Gdansk is in the north of Poland and has a long history as a port city where live 460,000 inhabitants. The city is dealing with urban changes, ageing and loss population problems these days. The city has a long relationship with trade and shipyards which changed and influence city economy and structure. The new investments in post-industrial city and regeneration of the brownfields have to change the city image which has been developed by city government. (Sagan, et al., 2012) Municipality developed number of regeneration and revitalization projects of inner-city, brownfields. (Figure nr.24) Urban regeneration project Young City in Gdansk – including the area of the former shipyard – aims to create an integrated infrastructure and bring back to the waterfront to the city within one great project. The realization is based on public-private partnership. (Piskorek, K., 2012, p. 1) (Figure nr.25) However, the projects aren’t dealing with socio-structural and socio-cultural changes. Moreover, these raise the new development position in the regeneration process which is dealing with demographic changes, economic pressures and neighbourhood improvement which powered by residents. All these factors are important in the urban government planning system and have potential to grow up as citizens’ participation in the development of the city. (Sagan, et al., 2012)
ritory these days. Therefore, the regeneration process of inner-city and project of waterfront like “Young City” aren’t dealing with local needs and social differences, but developing modern and new economical centre which is generated as commercial and historic sites for visitors and tourism. Also, those problems come from “elite” urban planners and architects, who are designing those areas in Gdansk, by generating not essential things, showing overlook of the city and their generated scope, magnitude in regenerated territories. All this comes in Poland by coping or following regeneration process from Western Europe countries. (Sagan, et al., 2012) This problem is compounded by the fiscal realities of most Polish cities – the dire poverty of public economies that forces cities to think entrepreneurially while depriving them of the very resources needed to implement viable strategies of urban regeneration. (Sagan, et al., 2012, p. 1141)

The renewal process isn’t a new movement in the Gdansk city between 1989-2004 there were done several revitalization projects which most of the focus in economic renewal, new investment attraction and saving heritage in developing tourism, in the city. All these projects were small-scale so their influence doesn’t impact city development. In 2004 when Poland joined the EU, there was developed first big scale regeneration process, called “Programme for Revitalization (Rewitalizacja) of Degraded Areas in Gdansk. Local Revitalization Plan.” This project has focused in pull in external investment, gentrification and tourism, and, most as other projects before, shortage of social life quality. (Sagan, et al., 2012) In addition, the strategic approach of the city government has only slowly acknowledged a need for border citizen participation – a fact that partly echoes the autocratic planning styles of the past as well as a lack of sensitivity for the benefits of local knowledge. (Sagan, et al., 2012, p. 1148) As it was mentioned before, most of the regeneration and revitalization projects in Gdansk and Poland financed by EU funds. There are two stages of co-financing the programs which helped to create long term planning programs. First (2004-2006) and second (2007-2013) stage programs were focusing in socio-economical factors, environment and “upgrading” inner-city. Moreover, there are notable that programs dispose of the to the economic attractiveness and improvement of employment prospects. (Sagan, et al., 2012)

Other regeneration programs can be called “successful” which have been done by local authorities and taking one way planning system. Those projects related to international events and representative projects of brownfield revitalization, often by converting an old industrial building into cultural or commercial centres. (Sagan, et al., 2012, p. 1148) Neighbourhood regeneration programs are other processes which have been going in Gdansk city, which sometimes called “showroom of Gdansk”, and developed by local government and authorities. Those projects have been developed with a lack of resident’s involvement in the process and only after some groups protest, planners include the local needs. Most successful projects are those which have a good strategic location, for example, Dolny Wrzeszcz district where international event (2012 UEFA European Championship) was located. To conclude the revitalizing and regeneration processes in Gdansk city are polarized to territory image but not living quality. After 2004, there are notable that participation process is increasing in the projects, but it is still insignificant in developing inner-city of Gdansk city. (Sagan, et al., 2012)

Figure nr. 25 “Young City” project vision of Gdansk city, Poland.
4. Stakeholder analysis

Stakeholder analysis has been done by interviewing local people (communities chairman and sub-eldership monitors) and professionals (architects, planners, project manager). Stakeholder was chosen the local representative because all those people live in/next to the subject area, and they represent the local people. Moreover, the small number of inhabitants and professional planner and architect to gather professional opinion and discussion about regeneration process and residents’ participation in the planning process of the study area and other familiar converted territories in Vilnius and Lithuania. Moreover, the small number of inhabitants in the area, time limit and people reluctance for asking to take interview, let to choose to take interview from small number of people. The interview processes done by asking open questions (Appendix nr. 2) which gave opportunity for speakers to give their opinion and thoughts. Analysis divided by the five steps from opinion about the regeneration, conversion process until potential the functions of the study area.

Regeneration, conversion processes and participation. Some of the professionals and locals think by analysing in the history of industry development that most of the existing and abounded industry territories have developed which needed water (let into, out) into and next the most beautiful nature and city areas. The industry occupied the most beautiful zones in the city and towns. This historical mistake is needed to be fixed by eliminating manufacturys and industries in the territories which are cast-off in the 21st century economy. Aluzienė thinks that the conversation process is one of the methods how to invite people to come back and live in the city centre. Because, people populate the peripheries of the cities decade ago, and this process are still going (urban sprawl), but now some of the residents want to come back in and around inner-city (in converted areas) because it is close to the workplace and developed infrastructure. Every stakeholder agreed that this conversion/regeneration process has to be done in industrial and other derelict areas in the city centre and next to the valuable nature zones.

National or city municipality should protect the regenerated and converted areas. It means that all converted territories should have a conception /strategic plan how to develop this area with the list of the functions, public spaces, valuable architec-tural buildings and structure, and other points which would suppose the development of the territory. After it can privatize or sell to private investment. Because the existing situation of the converted areas is vice versa when the city municipality sell abounded, or industrial land and private investment develop territory to get a bigger profit by “converge into square meters”. What is why, we have the result of large malls close to the city centre and other developed residential, commercial territories which are special and structure different what surrounding. All this opinion is popular and notable in stakeholder interviews: talking about the project “Park of Architecture” and development of converting territories. Also, the professional and residents criticize the loft development in the converted areas because they think that private investment are developing territories or buildings by cleaning everything what is inside and outside the building and leaving only the building’s walls and ceilings, later reconstruct the buildings for offices and apartments. Moreover, this development process ignores the ecology and existing volume connection with surrounding because all the lofts built as reconstruction which allows lower legitimate development than new development. The entire professionals think that new territory planning law could change this situation in this territory development (new law accredited in 02.2013). “Belmonto” and “Kuro aparatuŗos” lofts have been mentioned few times and criticized by professionals and residents because of the volume of the “Belmonto” loft and “Kuro aparatuŗos” development strategy. Moreover, Labutis thinks that this type project should do faster than 10-20 years because there is several project started, but left only blueprints which are waiting for new investment or economic change. These long period projects reduce the society trust in regeneration and conversion process.

Some of the professionals disagree that regeneration or conversion process has to be done by including society in the planning process. Their arguments were that this participation process is “fashion” or “on top” in the conversation process in developing territories and it is just manipulation of people. Moreover, this process is another study, which analysis the society. Vyšniūnas gives example, that this game loves Jan Gehl, who talks about this process, but it isn’t the Urbanism, spaces, but it is public space’ social function. The professional gives the opinion
that modern-day Lithuania society has a lot rights and possibilities to give their opinion and arguments public and anonymous Internet sites. Lithuania’s society can be easily manipulated politically, and the economy and society need to be grown up culturally and spiritually because there is a strong personality/individual feeling which stops from sociality development in society. However, inhabitants of the area and project manager think that people should be involved in converting territory development, because some of those people could be potential residents and users of the regenerated territory. Aluzienė thinks that planning converted territories need to be involving the communities from the beginning of planning because it helps to protect from conflicts and obscurity between society and planners. So it is a long and hard process. Moreover, locals and professional agree that modern - day people always think of how to protect his/her own territory and maybe later he/she will think about the surrounding or other people. All stakeholders of interview support the idea that communities of the developing territory and the neighbourhood could be included at the beginning of the planning process when it needs to be created the conception of the converted territory but two professional think that it can’t be in further planning process. Vyšniūnas told that the community is the consumer of the territory. Moreover, Vyšniūnas and Karalius think that the society cannot help with creating the idea or participate in further process because people will give only their needs that “it would be clean, beautiful, safe, ecological, and practical” but “people should be listened”. However, the last planning process should be left for the architects and planner decisions, for example, the doctor takes a decision what kind of medicine apply to patient treatment not the patient choose the medicine. Most of the stakeholders give the idea that in participation process could be including some active group of people or monitor who represent a community or neighbourhood and inform the residents about developing process. Residents think that even architect can’t communicate between each other in the study area and developing more separate parts of the project than connecting it.

Opinions about “Park of Architecture”. Representatives of inhabitants think that “Park of Architecture” planners communicate and combine the plans with residents, many times and continue the process further. Moreover, the number of stakeholders agreed that it was the first project, planners were communicating a lot with inhabitants. Project manager and local residents agreed what Užupis community has attended the most in the development process of the plan. Vyšniūnas called it “good management, which has been done not by architects or planners”. Opinions about “Park of Architecture” are exiting various: some of the stakeholders criticize the project development, solution, design, other flatter the process. Local inhabitants criticize the project about the planned movement of the traffic, density of people and buildings, and buildings’ height. Most of the residents fear that all this developed small sites in the territory later will be closed by gates or boundaries which will stop citizens’ and city visitors’ movement in the territory. Moreover, there was planned to develop the sustainable area, but at least green area will be developed small strip next to the river bank and the planned intensity of the traffic and number of private car parking will pollute the area. Ankudavičius said that the density of building came from vertical to the horizontal apartment house. Moreover, Karalius thinks that the west side is planned by focusing on the style and design of building than it should be the planned to process, activities in the territory and volumes, spaces - main characters of the city planning. Vyšniūnas thinks west side of the area will develop as an architecture museum because in the planning process it was invited group of famous architects of Lithuania. Therefore, Vyšniūnas thinks it needs flatter that main planning company manage to do participation with stakeholders and group different type architects in this territory conversion process. Some of the residents think that east side territory development strategy is nicely done because the planner tried to create the height of the buildings by keeping the typography differences. However, all stakeholders disagree with the existing lofts development in the area, because the buildings structure and volume incongruous with surrounding now and in the future.

Memories about Paplauja and Markučiai area. All of the stakeholder remember the study area as industrial territory which started from Paplauja and continue until Markučiai. Few of people said that this area (Paplauja) was enclosed by fences and populated only Russian people. Moreover, this territory was protected by the army of the Soviet Union period. Project manager Aluzienė told that at study time (1978), she and her friends had never gone deeper than periphery of Užupis be-
cause the other side of Užupis and Paplauja territory had been undeveloped and protected. Some beautiful memories from childhood have been told by Karalius and Digrienė. Some of it:

“I remember that time to time in our home come some Smetoninė books, of course it was unlawful... and by dad show me one of them, there was photos from 20th century of the Vilnelė river band and landscape... It was a beautiful view, landsape and pine trees forest... as a young person I could understand how it can be this beauty and... That this area occupied by manufactories “

“My grandparents were first Lithuanians in the area... here; it was fields and gardens, cows and goat pasture before this territory has been developed by manufactories...”

All these memories show that Paplauja and Markučiai territory has been undeveloped, therefore, the manufactories and watermills exist in the territories which had been developed at the beginning of the 20th centuries. Few stakeholders told that industry destroys the beauty of the river Vilnelė and landscape around. They think that Vilnelė river, surrounding and Sapiegy hill is one of beautiful areas in the Vilnius. Some of the stakeholders compare this zone with UNESCO protected the Curonian Spit because of unique topography, wavy channel and a fast-flowing river Vilnelė. Moreover, it is a conflict between beautiful nature and urbanized city territories which it need to be more protected and developed sustainable than the existing situation.

The problems and opportunities. Aluzienė thinks that the territory should be applied and developed an expedient because study area is a part of the old town and inner-city; there are developed infrastructure, all communication, shops, kindergartens, schools and work places. 70% of the work places are located in the city centre of Vilnius. The study territory is a close nature and can be developed as part of the city. Digrienė and Revinskas said that this area (west side, Paplauja) is the hollow; there is a good acoustic where sound comes from an existing observation spot in Subačiaus street and it is strengthened by parametrically built industrial buildings, and very short time natural daily light because of the topography. Moreover, there aren’t developed daily functions in all study territory. Residents are missing a connection with the old town and other parts of the city.

The guidelines and potential functions. Karalius suggested that these industrial territories should be developed by saving valuable buildings, constructions even machines. Moreover, it should be developed “creating city in city” in the territory than Utopian ideas which have been done by another town planner/urbanist in the other parts of the world several decades. Moreover, it should focus on creating the social movement of this territory because “the city sleeps and work at home, but live in the streets”. This territory should be given “more liberal degree and even more, because it is a conversion, and it should be more movement in this area than in normal city; get autonomy status which provides style, behaviour and social connection...” Vyšniūnas said that there are no value objects, and it needs a new conception of the conversion process. Moreover, industrial buildings built in the Soviet Union period haven’t values only those which has built in the 19th-middle and 20th century. Local inhabitants think that both parts of the territories should be developed and protected as one by new design. Also, functions should be planned more for people who live/will live in and next territory. Labutis thinks that functions should be humane, social and sensitive to this specific environment. Moreover, the public space should be multi-functional and non-aggressive to the surroundings that every function could be easily available by the feet and bicycle in the territory. Paplauja and Markučiai territory should stay open for public.

Inhabitants would like to have daily use functions: grocery shops, meat shop, bakery, kindergarten, school, cafeteria and restaurant. Moreover, they would like to have building or space with culture function which use in theatre, community meetings and other, and education center. Education institution development should be considered of necessity in the territory. In the opinion of some residents, it should be developed the small manufactories and studios of different artists, craftsmen to remind the history of the territory. Residents think that the development of a bus line and bicycle tracks not only by the Vilnia river, but in all areas, and it could reduce the number of private car’s movement in the territory. Activities should be developed passive and active in the territory.
5. Case study .
5.1 Historical development and Heritage.

Historical development. The study area, Paplauja and the north part of Markučiai are historically developed territory in the southeast side of the inner-city and next to Vilnia River and area, except the east side, is part of UNESCO protected area-Vilnius old town (Senamiestis). The Vilnia river bank area was considered one of the beautiful areas in the Vilnius city where glacial period formatted topography with slopes in river side and beautiful views to the old town and the river bank. However, this territory has been changed in XX century by political view and development of the city, and these days picture of the site is unrecognizable and out of proportion with the old image of the area. The study area was very long time suburb next to the old town and had specific urban development than other suburbs next to the city core. (Racevičienė, 2006, translation by author)

The prime study area, urban composition characteristic, is the natural environment which base is river Vilnelė, which has been called Vilnia. River was the main factor that influenced all around river historic suburban development peculiarities, trends, structure, spatial composition and even their historical extinction or survival. About existed small river Vilnelė changes can gather only from historical sources, plans and iconography because the former situation hasn’t survived for, example, man-made irrigation equipment in Vilnia river bank. The alternation of the river is noticeable from the Vilnius city plan made by Fürstenhofas in beginning XVIII century and other historic city plans from different centuries and the last decade’ development of Vilnius city. (Racevičienė, 2006, translation by author)

The history of study area until 19th century. The city of Vilnius has long urban developing history when new town development coincides with the formation of the state in a century in 13th. Vilnius as the city has been called when got Magdeburg privilege and townships (Daunora et al. 2006, p. 77-78). Vilnius old town formation and development was growing next monarch and churches territories, around roads, main streets which connected most important city objects, buildings (city wall, gates, churches, abbeys, fort, bridge) in many centuries. Streets used as the transit axes were developed in city structure. As it was mentioned above, the study area’s urban development was the influenced by River Vilnelė, which watery
and wavy watercourse was barraged and built a watermill, workshops where were produce paper, groats, flour and gunpowder from the 16th century. (Figure nr.26) All territory composed by small channels with some islands, dams, bridges which had existed from 15th century until 19th century end and there were many streets or even buildings. The biggest channel was Kopanica channel that was named and formatted parallel Kopanica Street, which these days exist as Aukštaičių Street. Water flow used for Vaivada watermill which existed next to Paupio street bridge. 20th century beginning, the old watermill burned, lost the identity, function, later was demolished. All area was fully filled with small/big watermills, dams and studios which used swift flow of Vilnia River until 18th century. In the 18th century, the area existed as craftsmen’ workshops and living territory where stood masonry and wood buildings, 2 watermills and there had designed the Misionierių garden. (Racevičienė, 2006, translation by author)

19th century. The first urban development movement of the territory is notable in 1837 Vilnius long-range plan, but the plan was practically unrealized not only in Paplauja suburb, but even in all city, because long-range plan ignores existed ownership of land and buildings standing there. (Figure nr.27) 19th century first part, the study area survived as before with small density of buildings and canals. Inhabitants had liked to spend their spare time in this area because of the natural environment and beautiful Vilnia bank and canals system. The location can quickly identify as close (geographically) to the countryside rather than a suburb. (Racevičienė, 2006, p. 13, translation by author) Moreover, the land was use for vegetable-gardens, gardens and not used land, and divided into different size and form plots grid. The west side of the area had constructed by buildings that were familiar with the Užupis suburb system and related to city network. On the east side, buildings were built at the ends of the plots without any structure because of the natural environment, topography, and they had been various sizes, plan, construction and function. Also in the 19th century, 8th decade, there was started to eliminate the Kopanica channel, which later became like a street. This process had made because after many residents’ complaints that all trashes were pulled into canal and spread the stench. (Racevičienė, 2006, translation by author)
Moreover, this change is the second stage of new urban development in the territory that had started not only in this area, but also in Vilnius city in 19th century last decades. This movement had influenced from new science achievement and changes in social communication. In 1875 the Vilnius long-range plan, study area had planned as the stone made buildings and function were not residential. (Figure nr.28) As it was mentioned above, next to Misionierų garden, it was evolved Swiss garden (Šveicariškas sodas), and it belonged to Lipškiai family. Also, it connected with Kūdrų Park and visually with Rojaus garden, Markučiai hills. At the same moment, the city was growing by changing the density, social and economic interest. City government abounded to build new manufactories in district, but this law did not work, for example, famous leather processing manufactory even grow up from Valsbergas house to Golšteino leather manufactory in the study area. By 1875 plan, this area created as an industrial district. Also it had influenced by elimination of the canal system in the area and manufactories started to use the machines. In the beginning of 20th century, growth of the suburb stopped because of the new railway in the city all development relocated from the east to the west side of the city where sympathetic natural conditions and topography was. Moreover, there was built up new manufactories, studios and city grew up fast that it influenced the Paplauja territory as the suburb area next to Vilnius urban structure. With the end of the 19th century and beginning of the 20th century, it comes new social class which has been wealthy Vilnius citizens who bought the lands and converted from agriculture to commercial function. These changes impacted the density next to Kopanica Street, but sustain the dotted principle of structure. Every plot has different inside network of the buildings and had been made from stone, wood, one two floors and functions were outbuildings and residential. However, there are formatted some structure in the south part of Poplowskos (Paplauja) street, but lands towards to Vilnia left blank in the north part of the area. (Racevičienė, 2006, translation by author)

20th century. The urban development movement in the study area is with 1939 y. Vilnius city long-range plan and there was planned territory multi-functional where industrial buildings edge into between residential buildings. (Figure nr.29) It was trying to relocate the manufactories that polluted the Vilnelė water, and it had done because of the sanitary consideration, but also big side of the area belonged to Tory of Vilnius province. The plan provides 50 m blank site next to Vilnia bank, the free construction principle, stone made buildings with 2 floors and habitable attic and density of buildings should be 20%. Poland country occupied Vilnius city and region. The situation in study territory had not changed significantly. The district structure gradually changed from farmland to city structure, but the historical and economic changes in the country stopped the growth of the area more related with city density, architecture. Until Second World War, building density, structure and height did not overshadow natural and historic environment and kept the connection between neighbour suburbs. The industrial buildings formation started from the middle of the 19th century, and some of these buildings are remains until these days. (Figure nr30) In Paplauja suburb, it was developed two big industrial centres around Aukštaičių Street: first Golšteino fur manufactory (Paupio 28 and 30), second Lipskio beer and vodka manufactory (Paupio 20). (Racevičienė, 2006, translation by author) There is Drujos street bridge these days, there were used to being homestead type residential houses which some of them stood until now. Others had demolished when bridge constructed. Other residential houses had developed in the east and south-east side of the study area. (Figure nr.)

After Second World War, manufactories have been divided and created new industries in the area. Fur manufactory divided in “Vilniaus Kailiai” (Paupio 28, existing) and Ventos industrial association (Paupio 30, non-existent). Changing a time, Lipskio factory grew by attaching the land around the Aukštaičių Street and changing factory function to the electricity meters factory which later called “Skaiteks” industrial association. (Racevičienė, 2006, translation by author) In the east side of study territory formatted industrial manufactories with unrepresentative structure and density to the west side and even old town. The buildings and contractions are substantial and unsuited to the natural environment. There was developing companies UAB „Audėjas“, UAB „Markučiai“, “ Betonas”, others. Most of these companies operate these days, but they’re leaving this area for the new transformation “Park of Architecture” conversion process. These days, the study area is framed by a Vilnia river bank and streets and divided into two separate parts by Drujos street. (Figure nr.31) Moreover, the district is functioned
as residential and industrial in the natural environment and city surrounding.

**Heritage and protection.** After territory historical development, it needs to look which single/group of building area protected and what kind of protection zones are part study location. As it was mentioned before study area is part of the Senamiestis (old town) which is protected as architecture, urban and historical heritage. Also, this area is protected by UNESCO. The main protection’s condition is to save the existing historic street network, buildings’ architecture, density and height. Moreover, all study area is part of the “Vilnius old city with suburbs” zone (Vilniaus senojo miesto su priemiesčiais) and local significance urban monument UV-70 zone, A and B categories. In study territory, there are only several protected buildings and construction. Also, all of it located on the west side of the area. (Figure nr.32) The national government protects Paplaujos Bridge (Figure nr.33) as a historic bridge and it connects the Paplauja area with Užupis today. The other group of buildings (Aukštaicių st. 2., Paupio st. 18) (Figure nr.34, Figure nr.36) are registered as heritage and protected by the state. In Vilnius Senamiestis detail plan (Suvestinis vertybių planas), there are indicated more protected facades that are located next to Paupio Street and single/group buildings. (Appendix nr.6) Some industrial buildings are interesting by its architecture characteristic and structure most of it has built in the 19th and 20th century. One of them Paupio st. 28 (Figure nr.35) was Golšteino fury manufactory building and site. The buildings are part of “Vilniaus Kailiai” company which reconstructed the buildings and built new administrative and industrial type buildings in the site. However, the building facade was saved as it was eclectic style residential building which was built in 1890. (Figure nr.40) In Paupio st. 20, group of buildings characterized by parametrically typology and architecture style that are particular for industrial architecture in Vilnius and Lithuania in 19th and 20th century. This complex of buildings was Lipskio beer and spirit factory, industrial and administrative buildings. Other industrial buildings built in 1940-1990, and it isn’t valued as its architecture and network in all study territory. Most of this building had built significant volume and structure which aesthetic characteristic is not familiar with the surrounding urban structure. The territory was developed unreasonable, and it was unused topographic and hydrographical environment. (Racevičienė, 2006, p. 32, translation by author) However, boiler-house with chimneys is a contrast with surrounding and could be saved as an industrial accent and also of the height that it would remind industrial time in this area. (Figure nr.39)
Figure nr. 33 Paplaujos bridge

Figure nr. 34 Aukštaicių st. 2., group of buildings

Figure nr. 35 Paupio st. 28 administrative building

Figure nr. 36 Paupio st. 18 Group of buildings

Figure nr. 37 Building facades are protected by Paupio street left side
Figure nr.38 Paupio st. 33., group of buildings' facades

Figure nr.39 Boiler-house with chimneys (above and on the left)

Figure nr.40 Paupio st. 20 Group of buildings and buildings’ facades protected

Figure nr.41 former Locks manufactory building, Aukštaicių st. 14
Typology of urban structure. Typology analysis would help to understand what kind of developing structure dominates in the territory. (Figure nr.42) Moreover, this information is useful for the design proposal for designing the new the structure of the buildings and streets in the area. The typology study was done and indicated the typologies by using document “Vilniaus senamiesčio užstatymo urbanistinių struktūrų tipologija” (Vilnius Old Town building typology of urban structures) which separate the characteristic urban typology of Vilnius old town. First group, homestead type structure is an inherent extensive residential housing development when buildings are built in closed territory. This typology is notable in entire territory and they’re located next to Vilnia river and Subačiaus street. (Figure nr.43) Residential area next to Vilnia was described above. Second parametrically type characterized when building stands on the site boundary next to the street and not blocking the another side of street’s existing site boundary. In the study area, there are two types’ parametrically typologies: open morphology and regular structure. (Figure nr.44) This typology is old developed industrial areas and residential area in the west side of the territory. Third, separately standing buildings are those standing alone and dominate with a particular function in the site. (Figure nr.46) In the study area, there are two zones that are closer to Drujos street and operate a petrol station (east) and driving learning court. Fourth, free planning structure had formatted in 1940 -1990 when buildings built regardless the existing city, street network and square, plaza and yard space. (Figure nr.47) Fifth, high-rise building is more than seven floors and formative high-rise tower type building. (Figure nr.47) Both typology buildings and construction are most apartment buildings and it 5 – 12 floors. Sixth, it is a combination of separate standing and parametrically types – component groups of building type when buildings built parametrically by plot boundaries and built building by blocking the other buildings and/or dominate the different type single building/contraction which dominate in the existing space. Combination type, typography is dominated in industrial manufactories areas west and east side: “Skaiteks”, “Audejas” “Betonas” and other factories. (Figure nr.48)