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Urban Regeneration Strategies for Shrinking Post-Soviet European Communities: A Case Study of Valga, Estonia

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Declaration:

Hereby I declare that this doctoral thesis, my original investigation and achievement, submitted for the doctoral degree at Tallinn University of Technology has not been submitted for doctoral or equivalent academic degree.

Jiří Tintěra



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Kahanevate linnade elukeskkonna taaselustamine Valga linna näitel

JIŘÍ TINTĚRA



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List of Publications

The list of author's publications, on the basis of which the thesis has been prepared:

- Tintera, J., Ruus, A., Tohvri, E., & Kotval, Z. (2014). Urban Brownfields in Estonia: Scope, Consequences and Redevelopment Barriers as Perceived by Local Governments. Moravian Geographical Reports, 22 (4), 25–38.
- 2. Tintera, J., Kotval, Z., Ruus, A., & Tohvri, E. (2018) Inadequacies of heritage protection regulations in an era of shrinking communities: a case study of Valga, Estonia, European Planning Studies, 26 (12), 2448–2469.
- 3. Tintera, J. (2019) Innovative Housing Policy Tools for Local Governments in Shrinking Communities with a large share of privately owned apartments: A Case Study of Valga, Estonia, Transylvanian Review of Administrative Sciences, Forthcoming November 2019.
- Hendricks, A. & Tintera, J. (2019) Stadtumbau in Ostdeutschland und Valga (Estland) – Ähnlichkeiten und Unterschiede (Urban redevelopment in East Germany and Valga (Estonia) - similarities and differences), Zeitschrift für Geodäsie, Geoinformation und Landmanagement, 144 (2), 85–93 [In German].

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Contribution to the papers in this thesis are:

Article 1 – Urban Brownfields in Estonia: Scope, Consequences and Redevelopment Barriers as Perceived by Local Governments; authors Jiri Tintera, Aime Ruus, Epi Tohvri and Zenia Kotval.

The author of the thesis was the corresponding author of the article responsible for the research concept and data collection. He wrote the manuscript. The co-authors advised him on the focus of the research, practical issues of data collection and gave him valuable feedback on the text of the manuscript.

Article 2 – Inadequacies of heritage protection regulations in an era of shrinking communities: a case study of Valga, Estonia; authors Jiri Tintera, Zenia Kotval, Aime Ruus, and Epi Tohvri.

The author of the thesis was the corresponding author of the article responsible for the research concept and data collection. He wrote the manuscript. The co-authors helped him to collect data and gave him valuable feedback on the text of the manuscript.

Article 3 – Innovative Housing Policy Tools for Local Governments in Shrinking Communities with a large share of privately-owned apartments: A Case Study of Valga, Estonia; author Jiri Tintera

The author of the thesis was the sole author of the article responsible for the research concept and data collection. He wrote the manuscript. Zenia Kotval gave him valuable feedback on the text of the manuscript.

Article 4 – Urban redevelopment in East Germany and Valga (Estonia) – similarities and differences; authors Andreas Hendricks and Jiri Tintera.

The author of the thesis was a co-author of the article. He composed literature overview of the topic of the population shrinkage and was responsible for the part of the text describing the situation in Estonia with focus on the Valga. Andreas Hendricks was the corresponding author of the article responsible for the research concept and he wrote the manuscript

Introduction

Moto: the aim of urban policy is to create future perspective for inhabitants.

The shrinking cities phenomenon is widespread across Europe. Today more than half of urban regions in Europe shrink (Wiechmann & Pallagst, 2012). As a result of fundamental changes of the transition in 1989/1991, post-socialist Eastern Europe is even more affected by the depopulation and actual spot of the European urban shrinkage can be found there (Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014). The population of the Baltic States is decreasing due to migration and low birth rates, and the pace of decline since the collapse of the Soviet Union has in general been faster compared to the other eastern-European countries.

The influence of urbanisation and sub-urbanisation processes within countries (people are moving to bigger cities and from there to neighbouring municipalities) on local communities is often stronger than out-migration or low birth-rates on state level. As a result, communities are losing population at a varying pace depending on their size and location. Smaller communities that are further away from the capital are likely to shrink more quickly than the average.

The most visible symptoms of shrinkage in urban space are building vacancies and urban brownfields (Wiechmann & Pallagst, 2012). The overcapacity of houses and the outdated state of maintenance cause the decrease of real estate values (Elzerman & Bontje, 2015; Bernt, Colini, & Foerste, 2017). The private sector is not interested in investing in renovating properties or building new buildings. The result is the predominantly low quality of residential premises, the lack of quality apartments and presence of visually unattractive un-renovated buildings in urban space.

Building vacancies and abandonment create a negative image of the community. An urban space with abandoned and underused buildings has a negative effect on the attitude of residents towards their home (Wiechmann & Bontje, 2015). They may lose pride and place loyalty in their city and this in turn leads to a lack of initiative to improve their city (Reckien & Martinez-Fernandez, 2011). The quality and attractiveness of public space in the city centre play the key issue there. The chance to walk around in an attractive city centre with guests or business partners, to sit in a café or visit galleries is important not just for guests but, above all, for locals. It increases one's pride in one's home city and bolsters hope for the future.

The leadership capacity of local government in dealing with the consequences of shrinkage is crucial (Leetmaa, Kriszan, Nuga, & Burdack, 2015). In a dysfunctional real-estate market where private investments in building stocks are absent, the public sector needs to play an active role in retrofitting the housing stock. Besides growing imbalance between housing demand and supply local government need to cope with the underused social infrastructure (e.g. schools), transport and utility infrastructures, declining demand for local commercial services and changing demographic characteristics (particularly a rise in the proportion of elderly people) (Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014). All these processes have a direct negative impact on the attractiveness of urban space and the spatial policy of local government needs to react to them. Further depopulation puts greater pressure on local municipal budgets, which limits municipality capacities and resources making the position of municipalities even weaker.

This doctoral thesis maps the possibilities of local governments to react to the negative outcomes of shrinking population on urban space in the town. On the example of the small shrinking town of Valga in Estonia it focuses on the spatial policy tools that can be developed by the municipality to make urban space more attractive and to redevelop the urban brownfields in the city. The thesis works with the hypothesis that the influence of urban space on citizens' bond with their hometown is substantial and thus the improvement of the quality of urban space plays a key role in the governance of urban shrinkage.

This work aims to give a set of applicable lessons and recommendations to local governments in small shrinking communities to improve their spatial policy strategies for urban brownfield revitalisation as well as for adaptation of state-wide regulations on shrinking town realities. The work should help to initiate a wider discussion of possible assistance that Estonian state and society could propose to depopulating communities.

The author of the thesis has assisted the local government in Valga since 2013 as a public space specialist and has been actively involved in various aspects of local planning. Field observation, interviews and knowledge of local planning policy gained during the period facilitated a deeper understanding of the town's built environment, historic resources, and property conditions. The main part of the thesis has been published in four papers in peer-reviewed international scholarly journals as well as presented at several conferences and urban space seminars. During the author's cooperation with Valga municipality, the town has gained a reputation as an example of an active town dealing with the outcomes of urban shrinkage in Estonia.

The thesis is divided into seven chapters. The first chapter gives a broader overview of the causes and consequences of urban shrinkage, the role of the quality of urban space in shrinking communities, and spatial policy tools used by local governments to react to the outcomes of depopulation. The second chapter addresses the problem statement, the aim of the study and the research questions. The third chapter details the methods used in this work. The forth chapter presents the case study of Valga. The fifth and sixth chapters contain the results of the study. The fifth chapter includes the summaries of the four published papers and the last chapter summarises spatial policy tools for local governments in shrinking communities. Conclusions are presented in the seventh chapter.

1 Literature Overview

1.1 Urban Shrinkage

1.1.1 Change in Perception of Shrinkage

A large share of European cities and towns are losing population. According Wiechmann & Pallagst (2012), 54% of urban regions in the European Union are shrinking. Scholars see shrinkage alongside with population growth as a natural part of urban development and call for change in the perception of shrinkage (Sousa & Pinho, 2015; Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012). Currently positives associations towards urban growth prevail in contrast to negative ones towards shrinkage (Reckien & Martinez-Fernandez, 2011). The example of some cities in Asia and Africa proves that fast population growth brings complex problems to their urban development similarly to fast population decrease in some European and North American cities. Therefore, any fast population change is a challenge to urban development and we should rather aim for stability than population change. Hence shrinkage, if not too fast, is not necessarily a negative phenomenon and should be seen as a value-neutral term (Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014; Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012; Elzerman & Bontje, 2015). We need to accept shrinkage and abandon growthoriented policy as the only possible solution (Elzerman & Bontje, 2015). There is no singular definition of urban shrinkage. The term "shrinking city" is mainly used for a city that is losing its population together with its economic importance (Reckien & Martinez-Fernandez, 2011; Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012; Kotilainen, Eisto, & Vatanen, 2015; Bernt, 2016; Sousa & Pinho, 2015; Wiechmann & Bontje, 2015; Haase, Bernt, Großmann, Mykhnenko, & Rink, 2016). Population loss exceeding 1% per year can be taken as an indicator of a shrinking community (Wiechmann & Bontje, 2015).

1.1.2 Planning for Shrinkage

While population shrinkage is a natural part of urban development, planning for shrinkage should be a natural part of planning practise (Wiechmann & Pallagst, 2012; Hollander & Németh, 2011). Yet most common reactions of planning in shrinking cities are strategies to reverse shrinkage and foster growth, but we need strategies to optimize the consequences of shrinkage (Sousa & Pinho, 2015). Planning for shrinkage does not work if it presupposes urban growth (Wiechmann & Bontje, 2015). The goal of planning in the context of depopulation should be a smaller but nevertheless a viable city (Kotilainen, Eisto, & Vatanen, 2015; Elzerman & Bontje, 2015). Scholars set the city residents' quality of life as a goal that urban policies should focus on, not on population growth (Pužulis & Kūle, 2016). Urban redevelopment should be the matter of achieving maximum quality of life to a maximum number of people (Sousa & Pinho, 2015) and the core value to be protected is the urban community as a living entity (Miota, 2015). The aim of urban redevelopment policy is to create future perspective for inhabitants (Elzerman & Bontje, 2015). According Schenkel (2015) urban redevelopment is a comprehensive and integrated vision and action, it leads to resolving urban problems and seeks to bring about lasting improvement in the economic, social and environmental condition of the area subject to change.

1.1.3 Every Town is Unique

As cities are ultimately different, there are no generic solutions for shrinking cities (Wiechmann & Pallagst, 2012). Development depends on the actual institutional settings and market conditions in a particular location (Bernt, Colini, & Foerste, 2017). Still, we can observe some similarities in how cities shrink (Bernt, 2016) and in their reactions to depopulation. According to Elzerman & Bontje (2015), a suitable policy response to shrinkage generally consists of the acceptance of shrinkage, developing a long-term vision, engaging the inhabitants in the process, restructuring the housing market, and fostering intensive regional collaboration. A shrinking city can be resilient to the outcomes of the shrinkage if it succeeds in finding a new role within the national economy (Kotilainen, Eisto, & Vatanen, 2015).

1.1.4 Estonian Realities

The phenomenon of urban decline and the necessity of planning for shrinkage is nowadays largely accepted among scholars and planners in the USA and Western Europe. Post-Soviet countries of Eastern Europe have started to recognise the phenomenon only during recent years (Leetmaa, Kriszan, Nuga, & Burdack, 2015; Pužulis & Kūle, 2016), and knowledge about suitable policy response to shrinkage has been relatively limited. Estonia, due to the level of economic development recently achieved, is turning its attention more and more towards the problems in depopulating urban regions and can be an example for policy makers in other post-soviet and post-socialist countries. Estonian urban planners are leading a theoretical discussion about urban shrinkage and this discussion has brought about vivid resonance in Estonian society. But there is still little practical guidance for local governments in shrinking communities and policy makers on state level. This thesis aims to fill this gap focusing on the problems of urban space redevelopment. As small towns prevail among shrinking urban communities in Estonia, the thesis concentrates on them. Scholars mostly focus on the problems of larger cities, there are only a few articles on shrinking small cities and rural areas which have been published recently (Leetmaa, Kriszan, Nuga, & Burdack, 2015; Pužulis & Kūle, 2016; Wirth, Elis, Müller, & Yamamoto, 2016).

1.2 The Drivers of Shrinkage in Post-Socialist Europe

1.2.1 The Drivers of Shrinkage

Why do cities shrink? Elzerman & Bontje (2015) describe the causes of shrinkage generally as a combination of economic, demographic and political factors. As the main economic driver of shrinkage scholars point out generally some sort of economic transformation, mostly deindustrialisation (Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012; Reckien & Martinez-Fernandez, 2011), which causes economic decline (Wiechmann & Bontje, 2015) and brings declining competitiveness and job losses to the city (Sánchez-Moral, Méndez, & Prada-Trigo, 2015).

The main demographic factors causing depopulation are low fertility rate and out-migration. Kroll & Haase (2010) see the influence of out-migration more significant than fertility rate. Out-migration is the outcome of declining economy of the town and job losses, which force people in the labour market, to seek jobs elsewhere. Besides job losses many scholars point out the importance of suburbanization process to the population decline of the cities (Reckien & Martinez-Fernandez, 2011; Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012; Großmann, Arndt, Haase, Rink, & Steinführer, 2015; Sánchez-Moral, Méndez, & Prada-Trigo, 2015; Wiechmann & Bontje,

2015). People moving to the outskirts of the city are mostly those that are active in the labour force and, as a result, population of shrinking communities is ageing (Sánchez-Moral, Méndez, & Prada-Trigo, 2015). Older population means lower fertility rate and natural population decline.

Suburbanization around growing cities is generally caused by high real-estate value within the core city on one hand and overpopulation and polluted environment on the other hand, both forcing home seekers to look further from the city. In the case of shrinking cities, the situation is different. Real-estate values are low and environmental issues play a much more important role. Pollution, obsolescence of productive infrastructure, unattractive environment and its loss of social and cultural functions are most often pointed out by scholars as the drivers of suburbanization in shrinking cites (Sánchez-Moral, Méndez, & Prada-Trigo, 2015; Wiechmann & Bontje, 2015; Pužulis & Kūle, 2016). According to Reckien & Martinez-Fernandez (2011) also instituted behaviour (mentality on individual level) - as pride in home city and place loyalty – can cause shrinkage. As attractiveness of urban space has strong influence on instituted behaviour, this thesis addresses the issues in more detail further in the text.

Political factors causing cities depopulation can be described as power and governance issues and their interaction on local, regional, national and global scale (Bernt, 2016). Spatial configuration is an expression of unequal power relations between different governance scales ending often with power at the centre and powerlessness at the periphery (Bernt, 2016). Similarly to Brent, Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot (2012) see shrinkage as a symptom of globalization. This thesis focuses in particular on policy response to shrinkage at the level of local governments, and the influence that state-wide regulations have on local policy and therefore it does not address global power issues and state regional policy in general.

1.2.2 The Drivers of Shrinkage in Post-Socialist Europe

Deindustrialisation processes resulting in urban shrinkage that were observed in Europe and North America, have been suppressed for long time in Socialist Europe due to the centrally planned economy. The situation in Central and Eastern Europe changed fundamentally after the transition of 1989/1990 followed by the collapse of the Soviet Union in 1991. The radical economic transition of post-socialist countries resulted in out-migration, a sharp drop in birth rates and suburbanization (Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014). The combination of this post-socialist transformation together with suddenly unblocked post-Fordist deindustrialization process has led to a severe shrinkage phenomenon in Central and Eastern Europe (Wiechmann & Bontie, 2015). Nowadays, the pole of European population decline on state level concentrates in the Balkan and Baltic region (Figure 1). The Baltic countries are the only post-soviet countries that are the members of the European Union currently. Free labour market within the EU facilitates out-migration to more developed countries but overall the loss of population is distributed unevenly among the urban regions in the Baltic states. The main factors causing the depopulation of small towns in the Baltic region is the concentration of population and economic activity in the capitals of the states (Pužulis & Kūle, 2016).



Figure 1. Population change in Europe 2004–2014 (RegioData Research)

1.3 The Influence of Shrinkage on Public Space

1.3.1 Urban Shrinkage and Public Space

Urban depopulation is a complex process which influences almost all aspects of urban development. Rink, Couch, Haase, Krzysztofik, & Nadolu (2014) sum the consequences of urban shrinkage as follows:

- A growing imbalance between housing demand and supply;
- A growing imbalance between the supply and demand of social infrastructure (e.g. schools), transport and utility infrastructures; declining demand for local commercial services;
- The emergence of vacant and derelict land and buildings (brownfields);
- Changing demographic characteristics (particularly a rise in the proportion of elderly people);
- Greater pressures on local municipal budgets.

We can assume that all the above-listed aspects have direct or indirect influence on urban space in shrinking communities. Growing imbalance between housing demand and supply means falling property prizes and leads to housing vacancies and derelict sites (Wiechmann & Bontje, 2015; Deng & Ma, 2015; Wiechmann T., 2008). Growing imbalance between the supply and demand of any type of infrastructure implies to over-dimensioned and underused infrastructure and increasing costs for infrastructure maintenance (Sousa & Pinho, 2015) which ends with unattractive urban space. Declining demand for local commercial services is connected with changing demographic characteristics. Less people means less potential customers but above that selective out-migration (students are leaving, greying of population) results in lack of entrepreneurs (Elzerman & Bontje, 2015). In urban space lack of entrepreneurs is expressed by underrepresented service sector (cafes, small shops etc.) Greater pressure on local municipal budget with decreasing revenue in combination or increasing needs limits public investment in urban space. Underinvested urban space generates urban sprawl because neighbourhood appearance is not satisfying (Reckien & Martinez-Fernandez, 2011).

The exoduses of population and functions lead to the abandonment of historic fabric (Newman & Saginor, 2014).

1.3.2 Market Gap

During the Soviet occupation most buildings were owned by the public sector or building cooperatives. After the collapse of the Soviet Union in 1991 building stock in Estonia (similarly to the majority of post-socialist countries) went through the process of large-scale privatisation. As a result, private ownership of the buildings dominates¹. Depopulation has an impact on housing as it increases vacancies (Haase, Bernt, Großmann, Mykhnenko, & Rink, 2016; Bogataj, McDonnell, & Bogataj, 2016). The overcapacity of houses and the outdated state of maintenance cause decrease of real estate value in shrinking cities (Elzerman & Bontje, 2015; Großmann, Arndt, Haase, Rink, & Steinführer, 2015). Low real estate value has multiple effects on building stocks.

Firstly, the private sector investment in buildings is economically unprofitable due to low real estate value. Mallach (2011) claims that housing markets often do not function in shrinking cities. One of the reasons is a market gap between the costs of restoration and the post-restoration market value of the property, which discourages the private sector to invest in housing redevelopment (Mallach, 2011). But similarly to housing redevelopment, investment in the construction of a new house does not have an economic value.

Secondly, low real estate value impairs local citizens' opportunity to get mortgage from private banks. In the Baltic States private ownership of housing prevails. 85% of the households live in their own apartment or house and only 15% rent them (Eglit, 2017). Home ownership typically follows a similar path. After moving out from their parents, youngsters first rent an apartment. Then, when their income is high enough, they buy their own flat and use this flat as a collateral for the mortgage. As their family and income grows, they move to a bigger flat or own house selling their smaller one and use the new one once again as a collateral. This path does not work in shrinking communities as banks do not accept real estate as a collateral due to its low value. It means that cheap properties in depopulating cities are paradoxically less accessible for locals irrespective of their income. The same paradox is applicable not only to housing, but also to office or commercial properties.

Both above described effects lead to shortage of private investment in building development. The outcome is largely low-quality building premises and a shortage of quality apartments. Underinvested and unmaintained buildings have negative influence on urban space attractiveness.

1.4 The Role of the Quality of Public Space in Town Development

1.4.1 Psychological Outcomes of Shrinkage

Urban shrinkage has, apart from the previously described economic and social consequences, also impact the psychology of local inhabitants. Sousa & Pinho (2015) claim that urban shrinkage has influence on social life and public sphere in the city causing the presence of negative psychological conditions such as hopelessness, lack of motivation and sadness among the locals. The inhabitants of a place form the core of any city (Kotilainen, Eisto, & Vatanen, 2015). The psychological bond between inhabitants

¹ More detailed information about housing ownership in Estonia can be found in the Article 3 in annexes.

and their place of residence has a significant effect on their activity in their communities. Reduced feeling of pride and place loyalty accelerates depopulation processes (Reckien & Martinez-Fernandez, 2011). Concentrated vacancy and blight have significant psychological health effects (Hackworth, 2016). For locals urban brownfields symbolize depopulation and decreasing local social and economic activity.

1.4.2 A Sense of Place

Individuals react to a place emotionally rather than rationally, a place evokes feelings among individuals (Hospers, 2011). Brehm, Eisenhauer, & Stedman (2012) explain the strong emotional connections individuals or groups have with a particular geographical locale through the concept *of sense of place*. They see that *sense of place* as a combination of place attachment and place meaning. Place attachment entails an emotional bond between a person and a setting and consists of place dependence and place identity. Place dependence refers to the ability of a setting to meet the subjective needs of an individual. Place identity is the extent to which a place becomes a crucial symbolic component of one's definition of self. On the other hand, place meaning is often distinguished from emotions and describe objective elements of the place setting (Brehm, Eisenhauer, & Stedman, 2012). A sense of place has a strong influence on people's behaviour as it fosters pro-environmental attitude. People are motivated to protect places which are meaningful to them (Brehm, Eisenhauer, & Stedman, 2012; Ouf, 2010).

Other scholars attribute residential attractiveness to have a similar influence on the people's behaviour as *sense of place* has. Miota (2015) defines *residential attractiveness* as a potential to attract different kinds of resources (economic, financial and human) and sees attractiveness as a relative built-up aspect which affects the behaviour of local stakeholders (Miota, 2015). Also, Reckien & Martinez-Fernandez (2011) point out the influence of residential attractiveness on place attachment of the citizens towards the area. It is the people who integrate topography, natural conditions and variations, and symbolic meanings, through their value systems, to form a sense of place (Jive'n & Larkham, 2003).

1.4.3 Place Marketing

Local governments in shrinking communities often try to react to depopulation by marketing the area as an opportunity for newcomers (businessmen and residents). Miota (2015) sees these efforts by public authorities to attract a desirable population problematic and calls for efforts to satisfy present population. Hospers (2011) explains that a place has three types of consumers: inhabitants, firms and visitors, and a place means many different things for those consumers. In accordance with Miota, Hospers appeals for concentration on the needs of inhabitants and explains it through locational inertia. The location choice of businessmen is a process which is far from rational, it is based on personal factors. Generally firm migration over short distances is a rule, as firms have a lot of location specific capital. Also, residents are less mobile than it is in general believed and this residential immobility can be explained by location-specific capital. Hospers (2011) describes this capital as emotional and the socio-economic ties residents have with a place; things like home ownership, neighbourhood integration, social networks and job-related assets. Place marketing campaign for tourists is of little use to counter shrinkage. Place marketing should focus on retaining and satisfying existing target groups. Former residents are also a good group to target (Hospers, 2011).

1.4.4 City Centre

Unattractive urban space generally prevails in shrinking communities and impairs emotional connections between individuals and their home city. If an individual experiences urban space full of abandoned and unmaintained buildings and underinvested urban infrastructure during their everyday walk from home to workplace, earlier or later they start to doubt about the future of the city. And if locals are distrustful of the future of any place, they are more prepared to move out. As Schenkel (2015) sums up, neighbourhoods with poor images have competition problem to keep their population. Au contraire, an attractive place has an ability to bond citizens and reduce the chances they leave (Hospers, 2011). From this point of view, urban policy in shrinking regions should primarily focus on offering future perspective for inhabitants (Elzerman & Bontje, 2015) by creating a positive narrative for a future perspective and the dissipation of the apathy of local residents (Sánchez-Moral, Méndez, & Prada-Trigo, 2015). The improvement of residential attractiveness of urban space is the key issue in this process.

As shrinking cities have generally limited financial resources, investment in the rehabilitation of the city centre should be prioritised. The city centre is a venue for commercial activities, tourism and residents (Sánchez-Moral, Méndez, & Prada-Trigo, 2015) and therefore its attractiveness substantively influences the image of the whole city. The chance to walk around with guests or business partners in an attractive city centre, to sit in a café or visit galleries is not essentially important for guests as they will leave soon, but above all for the locals. It increases one's pride in home city and bolsters hope for the future. The urban regeneration of the city centre plays an important role in the policy dealing with the outcome of population shrinkage (Wiechmann & Bontje, 2015).

1.5 The Urban Regeneration Policy of Local Government

1.5.1 Local Settings and Social capital

Urban governance is a complex process where multiple stakeholders have imporant roles. Rink, Couch, Haase, Krzysztofik, & Nadolu (2014) define urban governance as: *the sum of the many ways individuals and institutions, public and private, plan and manage the common affairs of the city. It is a continuing process through which conflicting or diverse interests may be accommodated and cooperative action can be taken. It includes formal institutions as well as informal arrangements and the social capital of citizens (Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014, lk 263).*

As mentioned in Chapter 1.1.3, the realities of every shrinking city are unique and therefore, governance strategies should adapt to this heterogeneity, and the role of local stakeholders is one of the keys to success (Prada-Trigo, 2014). Local settings and local social capital are the main drivers when dealing with shrinkage (Prada-Trigo, 2014; Wiechmann & Bontje, 2015; Ročak, Hospers, & Reverda, 2016). Leetmaa, Kriszan, Nuga, & Burdack (2015) define social capital as specific local attributes (entrepreneurial culture, local communication, local identity, governance practise) and see them as responsible for the way towns react to shrinkage. It means that there cannot be universal policy responses to depopulation and local government bodies need to adjust their governance practices to local conditions considering local social capital.

Amin and Thrift (1995) highlight the importance of peculiar configuration of local institutional factors for the economic development of an area. They propose the concept of *institutional thickness* to describe this configuration of non-economic factors

influencing urban development. A strong local institutional presence, high levels of interaction between local organizations, mutual awareness of being involved in a common enterprise among local organizations, and the existence of structures of domination and/or patterns of coalition are the four aspects of their *institutional thickness* concept (Amin & Thirft, 1995). Prada-Trigo (2014) enlarges the observations of economic, socio-occupational and institutional settings influencing urban regeneration strategies from historical perspective. She introduces the principle of *path dependence* of the city for debate. Actual institutional settings depend on the evolution of each city and system history. She sees those local inherited conditions and internal dynamics as fundamental elements for comprehending the evolution of regeneration strategies (Prada-Trigo, 2014).

Both presented concepts of *institutional thickness* and *path dependence* underline the influence of different public, private and non-profit institutions on the success of urban regeneration. In their research Coulson & Ferrario (2007) focus on *institutional thickness* enabling successful post-industrial economic recovery of the city of Birmingham in England between 1984 and 2004. Among the other institutions contributing to recovery they have detected several non-governmental and community-based organizations from the business community, development industry and local communities (Coulson & Ferrario, 2007). As their research focuses primarily on the economic issues of urban development, several chambers of commerce, industrial confederations and business councils have been listed among them. But as the result of growing concerns for inclusive regeneration policies the authors describe the growing role of non-profit organisation representing the interest of local inhabitants in the recovery process (Coulson & Ferrario, 2007).

1.5.2 Local Government and Urban Regeneration Strategies

Despite multiple institutions supporting local development described before, Coulson & Ferrario (2007) see local government as *primus inter pares* among them (Coulson & Ferrario, 2007, lk 607) as municipal government is responsible for the leadership of the institutional milieu. This is in accordance with the broadly accepted academical opinion that strong leadership by the public sector plays an indispensable role in urban government and city planning (Camarda, Rotondo, & Selicato, 2015; Stryjakiewicz & Jaroszewska, 2016; De Sousa, 2006). Especially for depopulating communities the leadership capacity of local government is strategic (Sánchez-Moral, Méndez, & Prada-Trigo, 2015). Shrinking communities are disadvantaged in the ability to plain their future as they have concurrently other problems to solve and they have insufficient capacities and resources to deal with them. Out-migration accompanying depopulation means a decline of social capital (Leetmaa, Kriszan, Nuga, & Burdack, 2015) and reduces the capacity of municipalities to react. Therefore Rink, Couch, Haase, Krzysztofik, & Nadolu (2014) consider growth or pro-growth governance easier and least challenging to understand than planning for shrinkage.

Possible policy responds to shrinkage consisting of traditional planning tools (public-private partnership, housing market, financial bottleneck) and alternative planning tools (culture, communication, social networks) (Elzerman & Bontje, 2015). Prada-Trigo (2014) classifies four possible directions of urban revitalization strategies: the *development of economy and employment; improvement in the governance and collective management of the city; social and economic innovation; and improvement in the quality of life, the environment, and the recovery of heritage (Prada-Trigo, 2014, lk 239). On the example of two post-industrial cites in Northern Spain (Langreo and Avilés) she demonstrates how the success of urban revitalization depends on adequate political*

responses to shrinkage. When Langreo concentrates their efforts on the re-industrialization of the city, Avilés has been looking for an alternative model of the development focusing on the improvement of innovation, entrepreneurship and quality of life in the city (Prada-Trigo, 2014). The relative success of Avilés's efforts against Langreo's ones demonstrates how relying on strategies which have brought economic growth in the past can lead a city to a redevelopment trap.

From different regeneration strategies presented in this chapter, the thesis focuses mainly on the housing market together with improvement in the quality of life, the environment, and the recovery of heritage.

1.5.3 The Role of Master Plans

Urban regeneration policy is one of the tools that local governments has to operate with when dealing with urban shrinkage. Despite its local dependency some similar policy components can be observed as successful examples of urban regeneration. Scholars see the elaboration of an appropriate master plan as a first and indispensable step in the development of municipality's urban regeneration strategy (Camarda, Rotondo, & Selicato, 2015; Sánchez-Moral, Méndez, & Prada-Trigo, 2015). The composition of a master plan requires substantial public involvement in the process and therefore it is a good platform to disseminate the knowledge about shrinking phenomenon among the locals. It means explaining publicly the reasons of depopulation and setting up a realistic future perspective for the city development path. Such public discussion helps to accept the phenomenon of urban shrinkage among citizens and local representatives. But besides this informative role, master plans offer legal framework for restraining some negative effects of urban shrinkage, for example a suburbanization process. It enables to plan downsizing of city territory prohibiting the development of new settlement areas in the surroundings of the city territory, supporting the development of new green spaces on brownfields and to strengthen existing local business in health, education, administration and cultural sectors (Wiechmann & Pallagst, 2012). A master plan offers legal support to local government's activity in the development and use of different urban regeneration tools. What are those tools municipalities can operate within the application of the urban regeneration policy?

1.5.4 Urban Regeneration Tools

Based on the previous arguments, urban regeneration is a complex task (Camarda, Rotondo, & Selicato, 2015) which main goal is the improvement of residential attractiveness of the city. This improvement is according to Miota (2015) possible to be achieved by the reactivation of housing market through massive housing demolition, housing diversification and the renovation of public space. Similarly, Prada-Trigo (2014) points out the importance of housing, renovation and the transition of disused buildings as the most suitable urban regeneration policy for shrinking communities, and in particular stresses the role of recovery plan for the city centre. Also, Wiechmann & Pallagst (2012) note that actual debate on urban shrinking policy in Germany emphasizes the problems of housing industry, the demolitions and revitalizations of city centres. The main urban regeneration policy tools local governments have to use can be summed up as follows:

- Building demolition;
- Active housing policy;
- Historic building renovation;
- Urban space revitalisation (focusing primarily on the city centre).

1.5.5 Building Demolition

Planning for smaller city territory expects building demolition² to the same extent. Kroll & Haase (2010) describe the paradox that if population of the city grows, land use grows. But if population declines, land use does not generally decline. As a result of this disproportion, underused and abandoned sites and buildings appear. The extent of necessary demolitions needs to be correctly assessed. Mallach calls for (2011) balance between demolition and preservation. He sees deciding whether an empty building will be preserved or removed from its perspective of reuse as the main factor. If there is no effective market demand and no realistic prospect of reuse, the building needs to be demolished (Mallach, 2011). In case of less valuable empty buildings, such an argument for demolition is easy to apply. A more complex situation emerges if a building carries historical or architectural value and if the building volume plays an important role in the urban fabric of the city (buildings on the street corner, on the edge of an important square etc.). The decision to tear the building down can be limited also by possible heritage protection of the building or its location within the heritage protection area. Nevertheless, those aesthetic qualities of an abandoned building must be weighed against the effect that a vacant building has on the health and well-being of its neighbourhoods (Mallach, 2011)³. Demolitions alone, as the only regeneration tool, will not improve the problem associated with shrinking neighbourhoods without some other forms of intervention (Hackworth, 2016; Rosenman & Walker, 2016).

1.5.6 Active Housing Policy

Social cohesion and housing are important elements of urban recovery (Sánchez-Moral, Méndez, & Prada-Trigo, 2015). In the case of dysfunctional housing market where private investments in residential buildings are missing, the public sector needs to play an active role in retrofitting the housing stock. Active housing policy consists of both demolition and renovation (Sousa & Pinho, 2015; Camarda, Rotondo, & Selicato, 2015). Demolition is a way of stabilizing the value of properties by the reduction of housing oversupply. Housing reconstruction enable to satisfy demand for quality rental flats missing on the real-estate market. Out-migration from shrinking towns causes lack of specialised labour force both in the public and private sector. The availability of quality living spaces is essential for attracting specialists as potential new-comers who need a place to live. As private investments are generally not profitable in shrinking areas, the public sector – i.e. local government with the help of the state – must interfere at least temporarily with the free market to satisfy the demand⁴.

1.5.7 Historic Building Renovation

In a situation where public funds are limited, investments (incl. housing renovation) should preferably be direct in valuable historic buildings in the city centre instead of building new buildings on the outskirts of the city. Renovated historic buildings improve the spatial attractiveness of the neighbourhood (Reckien & Martinez-Fernandez, 2011) as they carry a memory of the place and as such help to strengthen community identity (Ryberg-Webster, 2016). Building heritage plays a role in city

² More detailed information about building demolition can be found in the literature overview of the Article 2 in annexes.

³ The problems of demolitions within heritage protection areas is largely discussed in the literature overview of the Article 2 in annexes.

⁴ Housing policy in shrinking communities is in detail described in the literature overview of the Article 3 in annexes.

revitalization (Wiechmann & Pallagst, 2012) and historic buildings are potential assets in the process of urban redevelopment (Carr & Servon, 2009; Ryberg-Webster & Kinahan, 2017).

1.5.8 Urban Space Revitalisation

In case of the privately owned abandoned and underused houses the public sector cannot directly invest in their renovation. However, town government does own the public space between these buildings. Investment in urban space improves the residential attractiveness of the neighbourhoods and can raise the property value of the buildings in the area (Miota, 2015). Higher property value facilitates the reuse of abandoned buildings (Mallach, 2011). Thomson (2008) calls for targeting investments in a limited number of shrinking city neighbourhoods to maximise the impact of limited financial resources. As argued previously, the city centre should be the priority neighbourhood here, as its influence on the whole city development is higher. Despite requiring a lot of resources, investing in urban space in the city centre with its straightforwardly positive agenda is one of the easiest ways to improve the development of a shrinking city (Rhodes & Russo, 2013).

1.6 Influence of State-wide Regulations on Urban Space in Shrinking Communities

1.6.1 State Assistance

Any local municipality is influenced by its higher level of governance. Shrinking municipalities suffer because of weak local economy resulting in limited financial and human resources, therefore they are even more dependent on the decisions on national and regional level. Rink, Couch, Haase, Krzysztofik, & Nadolu (2014) call this phenomenon indirect centralism and explain it as follows: shrinking cities have a weak local economy, they are pushed to seek other potential resources and their dependency on central governments resources increases. Bernt (2016) sees unequal power relations (power at the centre and powerlessness at the periphery) as the main factor influencing spatial configuration on local level and call for higher interest of researchers in this domain.

Shrinking communities need assistance from state level mainly to tackle economic problems (Reckien & Martinez-Fernandez, 2011; Kotilainen, Eisto, & Vatanen, 2015). However, besides economic incentives Elzerman & Bontje (2015) name other examples of possible state actions supporting depopulating municipalities: the de-concentration of government institutions, universities, subsidy for industry. Intra-regional fast transport investments are also seen as a measure fostering the development of depopulating regions as they enable the long-distance commuting of labour force. Scholars see lack of support from state to shrinking cities one of the reasons why depopulation is more severe in Eastern Europe in comparison with Western one (Haase, Bernt, Großmann, Mykhnenko, & Rink, 2016; Rink, Couch, Haase, Krzysztofik, & Nadolu, 2014).

1.6.2 Regulations

Although, shrinking areas look for state help, several state-wide regulations make their struggle with the outcomes of depopulation even more complicated. State policy is generally uniform for the whole state territory and therefore does not harmonize with the reality in shrinking areas. Pužulis & Kūle (2016) propose that national policies have to be designed separately for growing and shrinking areas. Such policy diversification requires a clear definition of shrinkage and legal determination of shrinking areas.

In Eastern post-socialist Europe both national and local representatives lack the will to do so as it is politically difficult to communicate it. On national level the designation of shrinking areas means the acknowledgment of the reality that state fails in development of those areas. Local politicians on the other hand often feel shame to be officially labelled as a shrinking municipality. Therefore, spatial state development policy for the areas of population shrinkage is hard to develop.

There are plenty of examples of how state-wide regulations have different outcomes on urban realities in growing and shrinking areas. One of them are legal regulations of ownership. Ownership constraints represent one of the main barriers to housing redevelopment (Adams, De Sousa, & Tiesdell, 2010). The owners of abandoned properties in many cases do not live in the municipality any more, it is difficult to contact them and their interest in the property is often low. Expropriation process of those properties consumes inadequately too much administrative resources and is disproportionally expensive compared to their real-estate value. Institutional protection of ownership should be adapted for properties with low or missing value⁵.

Heritage protection can be pointed out as another example of dysfunctional uniform state regulation system in an area of shrinkage. Preservation regulations and incentives working well in growing areas, are insufficient in the context of shrinkage (Ryberg-Webster, 2016). The impact of much conservation activity is too constraining, usually aiming to minimize physical change (Jive'n & Larkham, 2003). But shrinking areas need to act. As they need to adapt their urban space for the need of smaller population, they are looking for more flexible balance between demolition and preservation (Ryberg-Webster & Kinahan, 2017). Above that heritage protection system imposes extra barriers of investments as the redevelopment of protected property is more costly (higher cost of project and building works). In shrinking cities yearning for private investors this has led to a higher rate of abandonment of protected buildings. A key to the prevention of neglect is balancing the past with the economic needs of contemporary society (Newman & Saginor, 2014). Preservation policies, programmes and strategies might adapt to the market realities of urban shrinkage (Ryberg-Webster, 2016)⁶.

⁵ Ownership constraints of housing redevelopment are described in detail in the Article 3 in annexes.

⁶ Article 2 in annexes focuses on heritage protection in shrinking towns.

2 Current research

2.1 Problem Statement

As a result of post-socialist transformation including migration and demographic factors Estonia has lost $15.6\%^7$ of the population since the collapse of the Soviet Union. The speed of depopulation process is not evenly distributed among Estonian communities. Due to continuing urbanisation and sub-urbanisation processes Estonian population is moving to the three biggest cities (Tallinn, Tartu, Pärnu) and from there to their neighbouring municipalities (Figure 2). The communities in other regions are shrinking at a varying pace. Between the last two Population and Housing Censuses issued in 2000 and 2011, there were only two towns in Estonia, Saue and Tapa, where the population had increased (Table 1). Saue is situated in relatively close proximity of the capital and its growth can be explained as an effect of urban sprawl. There is an important military base in Tapa, where the number of soldiers varies considerably year to year. In the remaining towns, the population had decreased. Tallinn, the capital city, and Tartu, the second largest city, and small towns in their proximity had shown only a moderate decline but some of the small towns elsewhere were affected much intensively losing up to 34.0% of their population (Püssi town). Since the last census urbanisation process has continued. Tallinn has restarted to grow and gained 8.0% of population between 2011 and 2019, small towns of Otepää, Kärdla and Antsla show minor population recovery but other towns keep losing inhabitants. Püssi town lost additional 28.0%. Therefore, the governance of urban shrinkage is an important issue for the majority of Estonian urban settlements.



Figure 2. Relative change in population in local government units 31.03.2000–31.12.2011 (Statistics Estonia)

⁷ Statistics Estonia, 2019

Cities	Year			Change [%]		
Cities		2011	2019		2011/2019	2000/2019
Tallinn	402,390	401,120	434,562	-0.3		
Saue	5,280	6,160	5,629	16.7	-8.6	
Keila	10,100	10,030	9,910	-0.7	-1.2	
Otepää	2,250	2,080	2,124	-7.6	2.1	
Sindi	4,260	4,240	3,806	-0.5	-10.2	
Kärdla	3,620	3,120	3,230	-13.8	3.5	
Tartu	106,200	100,670	93,865	-5.2		
Kuressaare	14,860	13,340	13,097	-10.2	-1.8	
Elva	6,440	6,260	5,664	-2.8		
Rapla	5,870	5,300	5,069	-9.7		
Rakvere	17,700	16,050		-9.3	-5.4	
Narva-Jõesuu	3,060	2,760	2,620	-9.8		
Maardu	18,020	17,360	15,332	-3.7		
Jõhvi	12,410	10,790	10,541	-13.1	-2.3	
Pärnu	46,630	41,150	39,438	-11.8		
Antsla	1,550	1,250	1,308			
Tõrva	3,210	2,740	2,703	-14.6		
Valga	14,550	12,830	12,182	-11.8		
Põlva	6,450	5,870	5,324	-9.0		
Viljandi	21,220	18,070	17,407	-14.8		
Põltsamaa	4,910	4,110	3,981	-16.3		
Paide	9,920	8,690	7,905	-12.4	-9.0	
Võru	14,960	12,790	, 11,859	-14.5		
Narva	70,320	62,200	55,249	-11.5		
Lihula	1,530	1,290	1,201	-15.7	-6.9	
Tamsalu	2,690	2,230	2,103	-17.1		
Kehra	3,380	2,860	2,639	-15.4	-7.7	
Suure-Jaani	1,360	1,090	1,057	-19.9	-3.0	
Võhma	1,620	1,340	1,258	-17.3		
Paldiski	4,550	4,190	3,529	-7.9	-15.8	
Jõgeva	6,570	5,500	5,073	-16.3	-7.8	
Haapsalu	12,560	10,480	9,675	-16.6	-7.7	-23.0
Türi	6,490	5,480	4,981	-15.6		
Тара	7,010	7,200	5,316	2.7	-26.2	-24.2
Kunda	4,020	3,580	3,036	-10.9	-15.2	-24.5
Karksi-Nuia	2,030	1,580	1,524	-22.2	-3.5	-24.9
Räpina	2,900	2,570	2,149	-11.4	-16.4	-25.9
Kilingi-Nõmme	2,240	2,220	1,650	-0.9	-25.7	-26.3
Abja-Paluoja	1,440	1,070	1,048	-25.7	-2.1	-27.2
Sillamäe	17,540	14,680	12,719	-16.3	-13.4	-27.5
Mustvee	1,780	1,470				
Kohtla-Järve	48,800	38,650				
Loksa	3,730	3,070				
Kiviõli	7,560	5,680	4,964	-24.9		
Mõisaküla	1,200	890				
Kallaste	1,270	1,000	738			
Püssi	1,910	1,260	907	-34.0	-28.0	-52.5

Table 1. Relative change in population in Estonian cities (author on the basis of Statistics Estonia)

There are 47 cities and towns (with or without municipal status) in Estonia and their population varies from 738 to 434,562 inhabitants (Table 1). Only five of them have a population bigger than 20,000, so a large majority of Estonian urban settlements can be categorized as a small town (Leetmaa, Kriszan, Nuga, & Burdack, 2015). The town centres of eight small towns have been declared heritage conservation areas.

The most visible symptoms of shrinkage in urban space are building vacancies and urban brownfields. Declining population accompanied by declining economy leads to underused and abandoned buildings and areas. As older buildings, if not renovated, offer generally lower standard of living and/or do not provide required conditions for their specific use, they are vacant first. Those buildings often have historical and architectural value and are placed within the core of the city. The quality of public space especially in the city centre is very important as it strengthens psychological link between the citizens and their place of residence. Town centres with abandoned and underused buildings have a negative effect on the attitude of residents towards their home as they symbolise the decline of economic significance of the community.

The overcapacity of houses and the outdated state of maintenance cause the decrease of real estate values and the private sector is not interested in investing in renovating properties. Local governments in shrinking communities are forced to play an active role in the revitalization of urban brownfields, as the private sector is not motivated to do that and the residents require action. Even if municipalities have generally a will to deal with the quality of urban space, their possibilities to act are limited. Population decline leads to lower tax income and puts pressure on local municipal budgets resulting in insufficient municipal capacities and resources, especially in small towns. Estonian legal and institutional framework settings are uniform for the whole country and generally do not consider the specifics of shrinking communities. The decisions of state institutions generally supersede the decisions of a local government and do not often accept the local needs. As a result of large-scale privatisation after the collapse of the Soviet Union, the majority of the real estate is privately owned including urban brownfields. All those barriers to urban brownfield redevelopment often encourage municipalities to act and are used as an excuse for the absence of active spatial policy in shrinking communities.

2.2 The Aim of the Study

The main aim of the study is to give a set of applicable lessons and recommendations to local governments in small shrinking communities on improving their spatial policy strategies for urban brownfield revitalisation considering the limitations resulting from the outcomes of shrinkage, real-estate market situation and Estonian legal and institutional framework settings. As a base for the elaboration of the recommendations on spatial policy, the study maps Estonian municipalities' perception of urban brownfields, their impact on the quality of life and barriers of their faster redevelopment.

The second aim is to address the barriers of state-wide regulations to spatial policy in shrinking communities and to propose adaptation of the regulations to the realities in depopulating municipalities. Estonian heritage conservation system is used here as an example, as it has by far, the strongest influence on urban space in the centres of many small towns in Estonia.

A case study of small Estonian town of Valga is used for this purpose. Valga can be used as a strategic example to explore the spatial policy tools for municipalities in depopulating towns due to its long-lasting struggle with population loss leading to property disinvestment and vacancy, current elaboration process of the Comprehensive Plan which aims to adapt urban space to a shrinking population (first Comprehensive Plan in Estonia with such a goal) and municipality reputation in Estonia as an example of local government developing innovative housing policy.

As most of the post-socialist countries in Eastern Europe experienced similar transformation processes following the fall of the Berlin wall and collapse of the Soviet Union, they have similar institutional settings as well as market conditions as Estonia. As such, Valga experiences are valuable also for local governments in shrinking communities of other Eastern European countries.

2.3 Research Question

A critical question the thesis poses is: What spatial policy tools can municipalities in small shrinking communities of post-socialist Europe use to advance urban brownfield redevelopment on their territory?

Drawing on a detailed case study of the town of Valga in Estonia, this thesis seeks to answer the main question from three different aspects:

Research Question 1

How do local government officials evaluate the impact of urban brownfield sites on the quality of life in Estonian communities?

- How do local governments perceive the extent and nature of brownfields in Estonian communities?
- What do local governments perceive as the most important negative impacts of brownfields on local communities' quality of life and how significant are these impacts?
- What do local government officials consider to be the main barriers to redevelopment of urban brownfields?

This Research Question is answered in Article 1

Research Question 2

Drawing on the example of Estonian heritage conservation system, what is the influence of state-wide regulations on urban space and spatial policy in shrinking communities?

- What barriers does Estonian heritage conservation system pose on urban revitalization in a shrinking community?
- How can Estonian heritage conservation system adapt policies to shrinking communities?

This Research Question is answered in Article 2

Research Question 3

What kind of spatial policy can local governments develop in a climate of urban shrinkage considering the Estonian legal and institutional framework?

- What tools can local governments use for urban brownfield redevelopment considering the frame of Estonian legal and institutional settings?
- What are the main barriers inhibiting urban space redevelopment?

This Research Question is answered in Articles 3 and 4

3 Data and Methods

3.1 Work Methods

The findings presented in the thesis are based on broad work with literature on brownfield redevelopment, urban shrinkage and psychology of place. The extensive use of primary data and observations together with guided student thesis work and practical work in the field of urban planning represents a significant contribution to the body of the thesis. To describe the population changes, statistical data from Statistics Estonia was used. The population and Housing Censuses issued in 2000 and 2011 offer more detailed information about population and property use in different parts of the town, with a focus on the centre of the town. Estonian planning and heritage protection legislation together with primary sources about the history of urban development in Estonia were studied. Several methods were used for the collection of the data presented in the thesis including several surveys, site inventories and practical work in the field.

3.2 Survey of the Municipalities

To gain an overview of how local governments perceive the presence of urban brownfield on their territory, mail-out questionnaires were sent to all 47 Estonian towns in December 2011 and follow up e-mails were sent in March and April 2012. The survey addressed officials at higher positions responsible for planning. In the case of small towns which sometimes meant even the mayor. From the 47 questionnaires sent out, 17 were received back. Three towns, Tallinn, Tartu and Maardu, were visited personally. In the end 20 of 47 towns participated in the survey.

The definition of brownfields elaborated by CABERNET⁸ was used during the study. Brownfields were defined as sites that (CABERNET coordination team, 2006):

- have been affected by the former uses of the site and surrounding land;
- are derelict or underused;
- may have real or perceived contamination problems;
- are mainly situated in developed urban areas;
- require intervention to bring them back to beneficial use.

Questionnaires included a set questions where respondents were asked to choose three of the set-up answers and sort them by their importance. The questions in the survey were composed to get municipalities' perception of the size of urban brownfields in the territory of the town, their impact on the quality of life and barriers to their faster redevelopment. As local governments have not an accurate picture of the extent of urban brownfields within their territories, the perception part of the survey proved to be more valuable in the end⁹.

⁸ CABERNET (Concerted Action on Brownfield and Economic Regeneration Network) is the European multi-stakeholder network which focuses on the complex issues raised by brownfield regeneration.

⁹ Detailed information about the survey can be seen in the Article 1 in annexes.

3.3 Practical Work

There were seven towns which in the survey marked the presence of brownfields in their territory as important. The author proposed to one of them, Valga town, to continue with a detailed study in order to create a model process for the inventory and assessment of all brownfield areas in the town territory in 2013. When presenting the intention to local officials, the municipality of Valga offered the position of a town architect to the author. The part time position of a town architect has enabled the author of the thesis to get a deep understanding of the Valga town's built environment, historic resources and property condition. On this position the author has assisted local government as a public space specialist and has been actively involved in various aspects of local planning. Field observation, interviews and knowledge of local planning policy gained during the period facilitated a deeper understanding of the town's built environment, historic resources and property conditions. Valga suits well as strategic case to explore the role of local governments in small shrinking communities in improving spatial policy tools for urban brownfield revitalisation due to its:

- Small size;
- Decades-long lasting depopulation process;
- Town reputation as an example of shrinkage in Estonia;
- Active spatial policy including elaboration process of the Comprehensive Plan which aims to adapt urban space to a shrinking population (first Comprehensive Plan in Estonia with such goal), building demolition and housing revitalization.

3.4 Site Inventory

A detailed study of Valga started in 2014 as a property inventory of the town territory. The goal of the inventory was to get an overview of land and building use. For each of the 3,038 plots in Valga, their actual use and/or vacancy was visually determined. The plots were classified as usable or not usable. A usable plot is a plot which has/had been developed or is designated for development in the Comprehensive Plan. The type of use was determined for each vacant plot:

• Greenfield: previously not developed land designated for development in the Comprehensive Plan;

• Underused area: previously developed mostly industrial land from where structures have been removed;

- Gap: solitary un-built land in compact residential areas;
- Brownfield: land with vacant or underused structures.

A structure, which was used less than half of its potential, was classified as an underused structure. For example, the apartment houses with less than 50% of apartments inhabited were marked as underused.

Land use categories were adapted from the project Circular Flow Land Use Management (CircUse)¹⁰ which was initiated in 2010 by the European Union Central Europe organization and co-financed by the European Regional Development Fund (Ferber, Jackson, & Starzewsk, 2011). For every plot in Valga data from the Estonian Land Board was firstly merged with data about structures on the plot from Estonian building register. Then during a three-day workshop in summer 2015 the students of Tallinn University of Technology walked through the town and visually evaluated the use of each

¹⁰ www.circuse.eu

plot. If there was a structure on the plot, the type of building and prevalent construction materials of the building were specified. The data was gathered to the database of land use, analysed and used for the elaboration of overview maps using GIS-software.

3.5 Survey of the Residents

To investigate the attitudes of the residents of Valga town centre the second survey was conducted by Valga municipality in 2016. The inhabitants were asked to evaluate the liveability and future development of the town centre. The survey was based on a similar survey conducted in 2011 in the Supilinn district of Tartu within the project titled "Using Participatory Planning Methods in the Supilinn Thematic Plan" (Nutt, Hiob, & Kotval, 2016). The questionnaire, adapted for Valga, included 43 questions where the respondents were asked to choose one of the set-up answers or to specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. A Space for comments was provided for each answer. Printed questionnaires were distributed to all 502 residential post code within Valga heritage protection area. The participation rate of the survey was low (38 answers, 7.6% response rate; n=502). As the questionnaires were returned mostly by older people, 8 students of Valga secondary school living in the town centre were contacted later and asked to fulfil the questionnaires to get the opinion of different age groups. A total of 46 questionnaires were received back during the survey. More details about the survey can be found in the methodology part of the paper II in annexes.

3.6 Dissemination

The findings have been presented by the author at following international seminars and conferences:

- 2019 oral presentation "The conflict between urban redevelopment and heritage protection a comparative case study in Görlitz (Germany) and Tartu (Estonia)" on 9th International and Interdisciplinary Symposium Land Use and Land Development in the field of tensions between environmental, social and economic sustainability in Kaunas, Lithuania;
- 2019 oral presentation "Spatial Policy Tools for Local Governments in Shrinking Communities: A Case Study of Valga town, Estonia" on VASAB Workshop "Urban dimension in spatial policies in the Baltic Sea Region. Trends and prospects of urbanization." in Schwerin, Germany;
- 2018 oral presentation "Housing redevelopment in Eastern Germany and Estonia comparison of tools for local governments in shrinking areas" on 8th International and Interdisciplinary Symposium Changes in Land Use Management Practices in Riga, Latvia;
- 2018 oral presentation "Revitalization of historic city centre in Valga (Estonia) on seminar Across borders cultural cooperation in Norway, Oslo, Norway;
- 2015 oral presentation "Valga town Urban planning in a context of shrinking" on The Innovation Circle Network VIII Annual Conference in Berlin, Germany;
- 2015 oral presentation "City of Valga (Estonia) Urban planning in a context of shrinking", VASAB Workshop on Urban Revitalization in Łódź, Poland;
- 2012 oral presentation "Urban brownfields redevelopment in Estonia: Local government's perception", 3rd International Conference of CABERNET on Managing urban land, Ustroń, Poland.

4 Case study area

4.1 Valga-Valka Twin-Town

Valga town is located in South-East Estonia on the border between Estonia and Latvia and it forms a twin-town with Valka (Figure 3). Valga lies 267 kilometres away from Tallinn and with its 12,182 residents (2019) constitutes to a medium-sized Estonian city (placed 12th out of the total of 47 cites). Valka with its 4,573 people is the 32rd biggest city in Latvia out of 76 cities and is 159 kilometres from its capital Riga. Although Valka population is much smaller, the sizes of both town territories are similar (16.5 km² and 14 km²). Neither Valga nor Valka town represents independent administrative units, but both are the centres of larger municipalities. Valga municipality stretches on 750 km² and Valka on 910 km².

There is no physical border between Valga and Valka since both countries have joined with the Schengen area (2007) and the same currency is in use since Estonia (2011) and Latvia (2013) have entered the euro area. As a result, the residents of the Estonian part of the city often use the Latvian part of the city for working, shopping, leisure purposes and vice versa. The twin-town currently works as one urban unit.

Valga town centre has been declared as Valga heritage conservation area since 1995. The area expands on 0.23 km² and 735 inhabitants lived there in 2011. The objective of the conservation area is to preserve the town centre as an urban whole as it had developed historically till the 1940s.



Figure 3. Valga - Valka (author)

4.2 The History of Valga Urban Development

Both Valga and Valka descends from the common town of Walk. The settlement of Walk was first mentioned in 1286 and obtained town rights in 1584. As Walk was never fortified, the settlement was destroyed many times or severally damaged during different war conflicts, last time during the Great Northern War (1700-1721). As a result of this war Walk was subjected to Russian rule together with the rest of Estonia. In 1783 Walk County was formed and Walk became and the administrative centre of it. Due to higher administrative status, first stone buildings were erected in Walk at the end of the 18th century: a church, a school and a county administrative building. All three houses have preserved till nowadays and constitute oldest building heritage in Valga.

The connection of the town to the rail network in 1889 resulted in the development of industry, which used railway to export its products mainly to the Russian empire. This brought about the period of fast urban growth during the last decade of the 19th century and the first decade of the 20th century. When the population of Walk in 1867 was 2,473 people, then in 1919 it was already 14,179 (Tammekann, Luha, & Kant, 1932). Before the break out of the World War I, Walk was a multicultural town with three main language spoken: Estonian, Latvian and German.

Estonia and Latvia gained their independence in 1918 as a result of Ward War I and the October revolution. The need to split the town between both countries appeared but the consensus about the border was hard to be found. Walk was divided only in 1920 after the long negotiation moderated by English Colonel S. G. Tallents. Konnaoja [Frog] stream was established as a border and the historical centre of the town together with its railway station remained in Estonia.

Due to the collapse of the Russian empire exports to Russia decreased considerably and Valga started to have serious economic problems. When directly after World War I the town population grew as a result of the increase in its administrative territory, then this trend turned soon during the Great Depression after 1929. The population decreased from 14,746 in 1929 to 10,842 in 1934 and continued to decrease until World War II. The interwar period was the time of strong urbanisation of Estonian population and Valga town losing its population was an exception among Estonian cities (Tammekann, Luha, & Kant, 1932).

As a result of the air attacks during Wold War II an important part of urban fabric in the town centre was damaged. The town re-started to grow only after the war ended. Estonia and Latvia were incorporated in the Soviet Union and Soviet market became accessible. Valga and Valka re-started to be important industrial towns and a military base was established there. Both of these activities had a significant impact on population growth: 13,354 people lived in Valga in 1959, but the population had increased to as much as 18,474 in 1979. Together with the Latvian part of the town the total population exceeded 26,500 inhabitants this year (Figure 4).

Estonia and Latvia's regained independence in 1991 meant that the Soviet army left Valga, and the city's industry, which had depended on the Soviet market, disappeared. The city population decreased by 3,172 people between 1989 and 2000 as a result of these changes and the population continued to decline. Since year 2000 Valga has lost 16.3% of the population (Table 1). The forecast of Statistics Estonia from 2014 prognoses, that if the trends do not change significantly, there will be under 9,000 inhabitants living in Valga by 2040 (Figure 4). This would make less than half of its peak population. The data from 2015, 2016, 2017, 2018 and 2019 has confirmed the forecast for now.



Figure 4. Valga - Valka population 1881 - 2040 (author on the basis of (Tammekann, Luha, & Kant, 1932) and Statistics Estonia)

The first period of the urban growth from the end of the Russian empire is actually represented in the town urban fabrics most often by two-storey wooden and/or brick apartment buildings (Figure 5). The second period of growth from the epoch of the Soviet Union left mainly four and five-storey brick or concrete panel buildings in urban space (Figure 6). Most of the new residential buildings were built on the outskirts of the town, but the areas damaged during Ward War II together with the areas where older houses had been demolished were used for erection also. Therefore, newer buildings can be found also in the town centre within the heritage conservation area. Figure 7 shows the distribution of apartment buildings in the town territory.



Figure 5. A typical apartment building from the first period of growth (author)



Figure 6. A typical apartment building from the second period of growth (author)



Figure 7. Distribution of buildings in town territory by their typology (author)

During the time of Soviet occupation most of the buildings in Estonia were owned by the public sector or building cooperatives. Similarly to other Eastern European countries, building stock went through the process of large scale privatisation after the collapse of the Soviet Union. As a result of the privatisation 90% of all usable plots in Valga are in private hands. In case of housing, only 84 (1.3%) of the 6,663 residential premises in Valga are owned by the public sector (Eglit, 2017).

4.3 Valga in Estonian Context

As pointed out previously in Chapter 2.1 of this work, the relative demographic loss of Valga town between two last population censuses (Table 1) was average among the Estonian cities. The same is be applicable when we concentrate on the situation of towns in South-East Estonia (Põlva, Valga, Võru counties). Counties situated in South-East Estonia generally show similar development paths and therefore they are often addressed as a whole in state strategies. State government is actually working out special South-East development program for the years 2019-2022 with total budget of 3.2 million euros. It is only the second such kind of development program in Estonia (after East-Viru County). *Table 2* shows population changes in the towns of South-East Estonia between the years 2000, 2011 and 2019. For both periods 2000-2011 and 2011-2019 Valga is placed in the middle among others. Otepää and Antsla towns have shown signs of population recovery during last years. It would be interesting to address the reason of this recovery, but this beyond the focus of the thesis.

Towns	Year			Change [%]		
	2000	2011	2019	2000/2011	2011/2019	2000/2019
Otepää	2,250	2,080	2,124	-7.6	2.1	-5.6
Antsla	1,550	1,250	1,308	-19.4	4.6	-15.6
Tõrva	3,210	2,740	2,703	-14.6	-1.4	-15.8
Valga	14,550	12,830	12,182	-11.8	-5.1	-16.3
Põlva	6,510	5,767	5,324	-11.4	-7.7	-18.2
Võru	14,960	12,790	11,859	-14.5	-7.3	-20.7
Räpina	2,900	2,570	2,149	-11.4	-16.4	-25.9

Table 2. Relative change in population in towns of South-East Estonia (author on the basis of Statistics Estonia)

Despite the fact, that Valga's population development path follows the general development of other Estonians towns, Valga has a reputation of an example of urban shrinkage (together with the industrial and mining cities of East-Viru County). The reputation bases on the presence urban brownfields in the urban fabric of the town. As there is no comparable data from other Estonians cities, we cannot assume that the share of abandoned or underused buildings in Valga is substantially higher than elsewhere. But the presence of urban brownfields is definitely more visible here. There are two reasons for this. Military troops with their families and servants who left Valga in 1990 is first of them. Approximately 3,000 inhabitants moving away during one year represents an important gap in population drop from which Valga has never recovered and which is quite unique among other Estonian towns.

The second reason is based on the visible presence of abandoned apartment buildings in the town centre. Apartment buildings from only two periods (the end of the Russian empire and Soviet occupation) are located in Valga. Brick and concrete panel houses built during the soviet occupation were generally equipped with central heating and water and sanitation systems, which were not present in older wooden houses from the Russian empire. Wooden houses are typically heated locally with wood and sanitation is generally missing. When soviet soldiers had vacated apartments in concrete panel houses, people were moved massively there from elsewhere as they offered higher standard of living at that time. As the older type of residential buildings prevails in the city centre and around the main streets, their higher abandonment resulting in neglect is more visible in the town's urban space.

4.4 The Outcomes of Shrinkage in Valga

4.4.1 Urban Brownfields

The actual Valga's population in 2019 constitutes 66% of town's peak population from 1979 (Figure 4). Despite some demolitions executed during the last years, still the size of the town almost corresponds to the needs of the population size the town had 40 years ago. This fact results in plenty urban brownfields present on its territory. During the Municipalities' survey (Chapter 3.2) in 2011 Valga was one of seven towns which marked the presence of brownfields on their territory as important but similarly to others did not have an overview of the extent of the problem then.

A detailed site inventory (Chapter 3.4) from 2014 detected that only 80.0% of the plots within the town territory, which could be exploited, were really used. As abandoned and underused plots were typically bigger than plots in use, only 71.9% of the territory of usable plots were exploited. Those numbers should be taken as approximate, as only visual determination of building exploitation was carried out. Visual determination fails to be exact when inspecting underused structures because it is often hard to detect exactly if a building is used by more or less than 50%. Despite those limitations there is an interesting relation between the population loss by one third and almost one third of the plots underused. Site inventories in other municipalities should be compiled to confirm the universal validity of this correlation. Figure 8 shows the distribution of abandoned or underused areas within the town territory.

Vacancy rates were set for different types of structures. From 206 buildings with commercial purpose, 42 were empty and 22 underused, from 128 industrial buildings 19 and 9 respectively. In the case of residential buildings, from 1,779 single family or duplex homes in Valga, 124 were empty and 45 underused. As explained before in Chapter 4.3 the vacancy problem is most acutely felt in the occupancy of apartment buildings. 45 of the 379 apartment buildings in Valga had been abandoned, and in 34 of them less than half of the apartments were occupied¹¹.

¹¹ Detailed overview of housing occupancy can be found in the Article 3 in annexes.



Figure 8. Land use inventory in Valga (author)

4.4.2 Dysfunctional Real-Estate Market

The large share of unused residential premises on the market lowers their real-estate value. The average price of an apartment sold in 2018 was 139.07 euros per square metre (*Table 3*) in Valga. Within this value transactions with apartments in buildings built during the Russian empire as well as during the Soviet Union time are presented. The first ones are significantly cheaper and typically sold by law enforcement officers for hundreds of euros per apartment. The square metre in soviet houses is generally more expensive yet a typical three-room apartment of 60 m² usually costs between 15,000 and 20,000 euros.

Such low price does not motivate the private sector to invest in renovating properties or building new apartment buildings. Only one dwelling-house has been built in Valga since the Estonian independence and the investor had to sell the property under the investment price. The result is the predominantly low quality of residential premises and the lack of quality (rental) apartments, although the need for them exists. Both public institutions (city government, hospital, schools, etc.) and private entrepreneurs have been struggling with the lack of specialised workers for a long time. However, the lack of decent dwellings makes attracting specialists to Valga very difficult. Low real-estate value of apartments reduces the possibility of using them as collateral for loan agreements as well. Therefore, individual investments in residential buildings incl. construction of individual houses are less affordable for local citizens.

Low real-estate value of Valga apartments can be clearly seen in comparison with real estate-values in the other towns of South-East region (Table 3). In Valga both, individual houses and apartments were sold for second cheapest value in the region (after Antsla town) in 2018 and the value of one average square metre of an apartment constituted only a little bit more than a half of an average square metre of an individual house. This relation is also the second lowest among the other towns in the region and shows that apartemets in Valga are disproportionately cheap even in comaprision with individual houses here. This can be explained by high vacancy rate and low standard of living that residential buldings offer due to chronical underinvestment.
Towns	Individual house		Apartment		
	average price per m2 in 2018	number of transactions	average price per m2 2018	number of transactions	proportion apartment / individual house
Otepää	701,73€	8	872,47€	19	124.3%
Võru	414,81€	24	479,35€	207	115.6%
Põlva	446,31€	7	382,94 €	92	85.8%
Tõrva	324,83€	9	264,98 €	28	81.6%
Räpina	403,15€	14	225,90€	21	56.0%
Valga	251,53€	36	139,07€	208	55.3%
Antsla	190,69€	9	96,97€	7	50.9%

Table 3. Transactions with residential buildings in the towns of South-East Estonia in 2018 (author on the basis of the Estonian Land Board, transactions database)

4.4.3 Unattractive Town Centre

The results of the Land Use Inventory revealed that the vacancy of the buildings in the town centre within the heritage conservation area was higher than elsewhere in the town (Figure 9). From all 137 plots within the heritage conservation area 127 were built-up. 88 (64%) plots were in use, 49 remained underused or abandoned. In the case of plots with a cultural monument within the conservation area even fewer are in use (14 out of 24, i.e. 58%). Compared to the 80% rate of the sites in use for the entire territory of Valga, both numbers (64% and 58%) are substantially smaller¹².



Figure 9. Land use inventory within heritage conservation area in Valga (author)

¹² Detailed overview of the heritage conservation area can be found in the Article 2 in annexes.

During the elaboration process of the comprehensive plan a need for the composition of new special conditions for heritage conservation emerged. To investigate the attitudes of inhabitants of Valga town centre a residents' survey (Chapter 3.5) was conducted. The results of the survey¹³ showed that the preservation of historic buildings in the centre was important for the majority of citizens (66%). Even if residents generally appreciated the historical environment of the area (58% of the respondents), 73% of them were in favour of new house construction on the vacant plots and 56% believed that it should be possible to replace historical buildings by modern ones. In most cases (80%) the respondents preferred to preserve the fabric of the town centre concurrently believing (72% of the respondents) that developments should be faster. Half of the respondents liked to live within the town centre and they planned to stay there in the future. The main motive for possible moving away for the second half of the respondents were mainly economical or professional. In addition to this, a large share of all the respondents felt they were forced to leave due to the presence of derelict buildings (43%) and due to the presence of inhabitants with social problems (37%) within the neighbourhood. Both aspects represent direct outcomes of urban shrinkage. The results of the survey confirmed that residents were not satisfied with the actual situation and they were looking forward to positive changes in the urban fabric of the town centre.

¹³ Detailed results of the residents' survey can be found in the Article 2 in annexes.

5 The Summaries of Publications

Article 1

Urban Brownfields in Estonia: Scope, Consequences and Redevelopment Barriers as Perceived by Local Governments. Moravian Geographical Reports, 22(4), 25-38.

The awareness of brownfields is limited in Estonia. In fact, there is no specific term officially used for brownfields at present. The aim of this study is to examine the concerns in the redevelopment of brownfields and to present preliminary findings regarding the scope, consequences and redevelopment barriers of Estonian urban brownfields, as perceived and assessed by local authorities. The perceived importance of the negative impacts of brownfields on urban space is more than the mere number of brownfields and their total area, as it is influenced by the presence of other negative socioeconomic phenomena, such as local unemployment or population decline. According to municipal authorities, major barriers to the redevelopment of Estonian urban brownfields, besides the economic issues, are both the lack of knowledge regarding state and local measures and tools to help the public sector deal with brownfields, and the common perception that brownfields re-development is a private sector issue (Tintera, Ruus, Tohvri, & Kotval, 2014).

This article addresses the Research Question 1.

Article 2

Inadequacies of heritage protection regulations in an era of shrinking communities: a case study of Valga, Estonia, European Planning Studies, 26 (12), 2448-2469.

Valga is a small shrinking town in Estonia where the heritage conservation area acts as the business, administrative and cultural centre of the town. Compared to the overall socio-economic situation of the town, the heritage conservation area suffers due to substantially faster depopulation and higher vacancy rates. Revitalisation of the urban centre is a key part of the small town's strategy. This paper addresses the question: In an area of urban shrinkage, what role does heritage protection play in the revitalisation of a town centre? Drawing on a qualitative case study of Valga heritage conservation area, the findings show that the current heritage protection system does not support revitalization efforts. There is a need to develop a new set of heritage conservation rules for shrinking cities and to adapt the current heritage conservation system to urban shrinkage. The paper further proposes some possible aspects of such system adaptation (Tintera, Kotval, Ruus, & Tohvri, 2018).

This article addresses the Research Question 2.

Article 3

Innovative Housing Policy Tools for Local Governments in Shrinking Communities with a large share of privately-owned apartments: A Case Study of Valga, Estonia. Transylvanian Review of Administrative Sciences, Forthcoming November 2019

Shrinking communities face a myriad number of problems. The physical manifestation of urban shrinkage can best be noted in abandoned or underutilized properties, an oversupply or deteriorating housing stock and inadequate aging infrastructure. These physical manifestations lead to psychological impacts of poor perception of a community, lack of a sense of place, lethargic residents who lack financial means or

motivation to improve their living conditions. Planning for the regeneration and rightsizing of shrinking communities calls for intervention by government sectors. Valga is a small town in Estonia where housing vacancies, low quality of residential premises and the shortage of quality apartments are the result of decades of depopulation. As a result of housing privatisation after the collapse of the Soviet Union, a large majority of the dwellings are privately owned. Housing demolition and revitalisation are a key part of the small town's strategy to deal with shrinkage. This paper addresses the question: In an area of urban shrinkage, what kind of housing policy can local government create in the conditions of prevailing private ownership of residential premises? Drawing on a qualitative case study of the town of Valga, the findings show that housing policy plays an important role in urban recovery for a shrinking community and the leadership capacity of local government in this process is critical. Ownership constraints in housing policy can be overcome but the lack of municipal finance and human resources together with insufficient legislation and missing cooperation with the private sector impedes the process (Tintera, 2019).

This article answers the Research Question 3.

Article 4

Housing Redevelopment in Eastern Germany and Estonia – Comparison of Tools for Local Governments in Shrinking Areas. Zeitschrift für Geodäsie, Geoinformation und Landmanagement, 144 (2), 85-93

This article gives an overview of different housing redevelopment tools for local governments in shrinking towns in Eastern Germany and Estonia. This paper uses Valga and Eastern Germany to compare the complexity of housing redevelopment in shrinking cities in Estonia and Germany. Housing redevelopment in Eastern Germany is mainly determined by the programmes of urban redevelopment which operating level has such a wide influence that the authors decided to choose a relatively large region compared to Valga instead of picking a singular city in Eastern Germany.

The paper concludes that while the population development and the basic strategies of redevelopment are similar in Eastern Germany and Valga, the awareness of this problem on national level is different. Municipalities use similar strategies for housing redevelopment - the demolition of vacancies, housing revitalization with a focus on monuments under heritage protection, investment in urban space in the city centre and paying attention to the needs of the ageing population.

Housing demolition decreased significantly the vacancy rate in Eastern Germany. The low real-estate value of residential properties in Valga impedes the will of private sector to invest in building revitalization because of low profitability. On the other hand, the property owners can be easier convinced to agree to a planned demolition of their buildings. In Germany, the unrealistic fiction of high values of real estate in shrinking areas is one of the biggest problems for urban redevelopment.

The programmes of urban redevelopment in Eastern Germany support investment in housing revitalization and urban space and it is easier for private investors to refinance their investments in German cities than in Estonia. The difference in the effectiveness of housing revitalisation tools used by Estonian and German municipalities in shrinking towns is based on the different levels of real-estate values and financial support from national level (Hendricks & Tintera, 2019).

This article answers the Research Question 3.

6 Results

Structural changes in Estonian economy and politics after the collapse of the Soviet Union were radical. Former agricultural complexes remained empty after the dissolution of collective farms, and military bases left behind by the Soviet Army appeared in the Estonian countryside. Factories where production did not suit the reality of the free market closed their doors and their vacant buildings remained standing witnessing the past epoch. An important part of Russian minority (constituting 40% of population by 1991) left the country and residential buildings serving them were not needed anymore. As a result, many brownfield sites emerged in the urban and rural landscape of Estonia. Facing extensive transformation challenges Estonian society did not have long-term capacity to deal with them. Nowadays, due to the accession of the country to the EU and fast economic progress experienced during the last two decades, Estonian society has reached the point when it is able to face the problem of vacant soviet building legacy. At the same time the outcomes of strong urbanization and sub-urbanization processes since the Estonian re-independence have started to become more and more evident. These developments have resulted in higher public concern about shrinking regions and urban brownfields during the last years. This thesis is a part of the academics' response to this interest.

6.1 The Impact of Urban Brownfield Sites on the Quality of Life

The theoretical impact of urban brownfields on the quality of life in their neighbourhood is known and it has been described in Chapter 1 of this work. Estonian landscape is full of abandoned and derelict structures. But there is a question: Does the presence of brownfields really distracts anyone? If they do not, there is no point in addressing them in research. To answer this question, municipalities in 47 Estonian cities and towns were contacted. There were two reasons for choosing town officials as a target group for the survey. Firstly, due to higher settlement density, brownfields in urban area have a stronger impact on their surrounding than rural ones. Secondly, local governments are on the frontline in dealing with the negative impacts of brownfields in their administrative area and therefore they should have a better overview of their presence as well as their influence on the residents' quality of life.

6.1.1 The Extent and Nature of Brownfields

The survey revealed that municipalities had a very limited overview of the extent of underused and abandoned areas in their administrative territory. At the time of the survey (2012) none of them had a brownfield inventory. The quality of collected data depended highly on the accuracy of respondents' answers. Large areas previously used for industrial or military purposes were likely to be noticed more often than small single vacant residential buildings. Abandoned areas were generally more noted than the underused ones, as the border between a site in use and an underused site remained often unclear for the respondents.

695 brownfield sites expanding on 1,152 ha were mapped during the survey. The detected brownfields formed on average 2.5% of the total urban area of the participating towns. Half of the brownfield area was former industrial and a quarter of them former military land. Due to limitations described earlier those numbers represent only a part of Estonian urban brownfields. CABERNET report (2006) highlights the importance of national land use database which should supply decision makers with

reliable and up-to-date information about the extent of underused or abandoned sites. The survey confirmed the validity of CABERNET coordination team findings. Estonia state government together with local municipalities need to develop such databases to be able to evaluate the extent and nature of their brownfields.

Today there are only a few municipalities which have carried out real land use inventory within their territories. Valga town is one of them. The results of this inventory are presented in Chapter 4.4.1 of thesis. Surprisingly in the case of Valga, the findings of the inventory fit quite well with the data gathered during the municipalities' survey. During the survey Valga officials evaluated brownfield sites to compose 5.6% of total urban area in Valga and the inventory sets abandoned and underused sites to form 5.9% of the town territory. But as we do not have comparable data from elsewhere, it can be only a coincidence.

6.1.2 The Negative Impact of Brownfields on the Quality of Life

Due to uneven quality of collected data, the survey did not discover significant correlation between the extent of brownfields within the urban area and the geographical and socio-economic characteristics of the town. In the case of perceived importance of brownfields' presence in the town territory the situation was completely different. Three geographical and socio-economic aspects were examined: distance from Tallinn, rate of unemployment, and population change between two censuses in 2000 and 2011. Officials from towns far from the capital with a high unemployment rate and with shrinking population evaluated the negative impact of brownfields on the quality of life to be more important than elsewhere¹⁴. The study confirmed scholars' findings which stated that brownfields located in municipalities with higher local development potential were more likely to be redeveloped (Frantál, Kunc, Nováková, & Klusáček, 2013). On the other hand, brownfield redevelopment presents an important challenge for shrinking towns and therefore, if we want to support brownfield revitalization, we need to focus primarily on the realities of depopulating communities. Abandoned and underused sites in growing municipalities with functional real-estate market will be generally reused sooner or later without the public sector intervention.

The officials from municipalities participating in the survey were clear about the nature of the main negative impact on brownfields' neighbourhood which was the loss of town attractiveness for investors and citizens¹⁵. The presence of brownfields in the urban fabric of a town symbolises depopulation together with declining local economic and social activity, which all threaten the town's future. This symbolic value of derelict areas and structures are far more important for municipalities (and local residents) than potential environmental issues. This is the reason why this thesis works with the hypothesis that the influence of urban space on the citizens' bond with their hometown is substantial and thus, the improvement of the quality of urban space plays a key role in the governance of urban shrinkage.

6.1.3 Barriers to the Redevelopment of Brownfields

The respondents of the survey saw two main reasons why the private sector is avoiding investing in brownfield sites – additional costs associated with clean-up and redevelopment, and low real-estate value of the site¹⁶. The first barrier can be addressed

 $^{^{\}rm 14}$ For more detailed information see Table 2 in the Article 1 in annexes.

¹⁵ For more detailed information see Table 3 in the Article 1 in annexes.

¹⁶ For more detailed information see Table 4 in the Article 1 in annexes.

by the public sector incentives which decrease the gap between the investments in greenfield and brownfield projects. Low real-estate value of the site is clearly a symptom of urban shrinkage and this aspect is discussed wider hereafter in the thesis.

The primary solutions for the promotion of brownfield redevelopment proposed by the municipalities were the increase of financial resources of local governments and the implementation of public subventions for potential investors. For both of these measures, municipalities seem to expect special funds from the central government. But apart from fiscal obstacles another aspect inhibiting the re-use of vacant land and structures emerged – central and local governments' perception that brownfields redevelopment is a private sector issue. In the context of urban shrinkage, where private investments in construction are not generally profitable, municipalities need to create an active urban regeneration policy and not wait that the free market to solve the problem by itself.

For 13 of 20 participating towns the presence of brownfields has at least medium importance. Therefore, the survey proved that it is important to focus on the problems of brownfield redevelopment, and this mainly in the context of urban shrinkage.

6.2 The Influence of State-wide Regulations on Urban Space and Spatial Policy

Realities in depopulating communities differ often from those in growing ones. Growing population brings about the need for residential, commerce and other types of buildings, real-estate value of properties grows, and this motivates developers to construct new buildings in empty spaces between the existing structures on brownfields as well as on greenfield areas in outskirts of the city. But developers often prefer to build where most of the people would live and work – in the city centres. If the free area for new construction is not available, the pressure to replace old structures by new and bigger ones is considerable. The public interest to oppose this development and to protect building heritage is clear. Therefore, societies around the globe have developed a different set of rules, heritage conservation systems, to impede the speed of redevelopment of old valuable structures or entire areas.

The same set of rules, which works well in growing cities, often fails to fulfil the expectations in shrinking areas. Depopulation leads to low real-estate value of properties and missing private sector interest in building development. Hence, any active individual who wants to do something with their property is valuable to the shrinking community. A system, which is designed to restrict activity cannot support such initiatives. If a potential developer has a free choice where to invest, as shrinking town is full of empty plots and vacant buildings, he would rather avoid protected structures or those that lay within the conservation area where development is more costly. This means that system design for the areas with higher development potential. This does not mean that building heritage in shrinking communities should not be protected at all. The society needs to conserve its architectural heritage but it also needs to adapt a shrinking town according to the expectations of its current population. Both of those requirements are objectives, but they can be in conflict which is not easy to solve.

In this thesis heritage conservation is used to demonstrate the inadequacies of state-wide regulations in the era of depopulating areas. But heritage conservation works only as an example here. Other types of requirements with a positive objective but

impeding development could be described. Growing requirements for lower energy consumption of buildings, fire safety, quality of design and construction works and others have similar effects on the urban space in shrinking towns. We need to aim to understand the realities of shrinking communities and adapt our systems to their needs.

6.2.1 The Barriers of Heritage Conservation System on Valga's Urban Development

As described in Chapter 4.4.3 of this work, heritage protection area in Valga town centre suffers from a higher vacancy rate than the rest of the town, and heritage monuments are even less in use¹⁷. There are two possible explanations for this phenomenon. Firstly, the structures within the protection area are naturally older than the structures elsewhere in the town. Due to the chronic disinvestment in building stock in Valga, older buildings generally offer lower quality of life and amenities. From this aspect building in the town centre would probably suffer the same vacancy rate even if not protected. Secondly, preservation requirements increase the market gap between the costs of restoration and the post-restoration value of the property and hence reduce the private sector interest in investment. Design and construction works are slower and more expensive, the choice of building materials is limited¹⁸. From this aspect preservation can be seen as an extra barrier for the development.

Chapter 1.4.4 characterizes the influence the centre has on the quality of life in the whole city and the functions the centre carries in the residents' everyday lives. As neglect and vacancy is concentrated in Valga centre, it impairs the reputation of the town among the residents as well as within Estonian society. For a better future perspective, Valga municipality needs to improve the image of the town and strengthen the psychological bond between the citizens and their hometown as described in Chapter 1.4.1. The attractiveness of the town centre carries a key role in the development of the whole town and the residential, commercial, culture and leisure functions of the centre need to be improved. This is difficult when the institutional authority of the National Heritage Board is over the local government authority and Heritage Board responsibility is limited only to the protection of the cultural and historical values of the area. Since the above described functions there is no clear authority to protect them, the preservation function of the city centre dominates.

Neglect and disinvestment in Valga centre have negative impacts on heritage protection as well. The main responsibility for maintaining a monument or valuable structure lays on its owner/user. When local residents observe that area declared as valuable to society continues to deteriorate year by year, they lose confidence in the adequacy of the whole protection system. The disproportion between a declared goal and the reality demotivates them and they are less prepared to devote their activity to the improvement of the area. If heritage protection system in Estonia wants to keep its authority, it must turn its interest to the need of shrinking communities as well.

6.2.2 The Adaptation of Heritage Conservation System to Shrinkage

Chapter 1.1.1 explains that for any successful urban regeneration strategy in shrinking communities we must firstly accept the phenomenon as such and stop waiting that population decrease would reverse by itself. This acceptance of the reality is certainly

¹⁷ A detailed description of the situation of Valga heritage conservation area can be found in the Article 2 in annexes.

¹⁸ The requirements of Estonian heritage conservation system are described in the Article 2 in annexes.

primarily necessary among the local stakeholders including municipal officials, but state institutions need to understand it as well. Therefore, an inevitable precondition for the improvement of the situation of heritage conservation area in Valga is that the National Heritage Board of Estonia would accept actual circumstances, understand them and take the responsibility for the future development of the area.

Valga's situation highlights several aspects of Estonian heritage conservation system that might need to be adapted to the requirements of depopulating towns. A new set of rules¹⁹ should:

- allow selective demolitions within a heritage conservation area;
- create a mechanism enabling the National Heritage Board to mothball or use other interim stabilisation measures for a historic building in the case of owner inactivity;
- assist property owners with the required design work;
- allow material and element alteration to keep a historic building in use;
- increase the public sector subsidies for owners to revitalise the most valuable cultural monuments;
- set mandatory preferences for the use of incentives from the state and European funds for the rehabilitation of historic bindings.

All the proposed adaptations focus primarily on keeping the building in use, as vacant structures generally deteriorate faster than the used ones. To achieve this goal, activities to retain the standard of living in the building should be as easy and affordable for the user as possible. This can be ensured both by softening conservation requirements and by improving subventions for design and construction works. Also, residential attractiveness plays an important role in keeping the residents and users in the area and therefore the given adaptations try to address this aspect also. The core value to be protected is the quality of life inside the conservation area and the use of the buildings under heritage protection.

6.3 Spatial Policy Tools of Local Governments in a Climate of Urban Shrinkage

One third of Valga's peak population has gone. There is no a realistic possibility to bring those six and half thousand people back, even in a longer perspective. Most regions suffering similar depopulation processes and experiences from abroad show that possible future immigration to Estonia would concentrate in and around the capital as Tallinn offers better economic opportunities for new residents. As population process would be a success. The acceptance of the reality is the first and inevitable precondition for the development of the urban regeneration strategy for Valga.

Next step is to focus on the quality of life of the people living in Valga. The town should ensure its residents the fulfilment of their needs: economic, social, environmental and psychological. In the fulfilment of the last one, the quality of urban space plays a key role. Urban space needs to be attractive to boost the pride of its inhabitants and support their activity. In the case of Valga, the size of the town territory has to be adjusted to meet the needs of current 12 thousand people. Therefore, part of the building stock needs to be

 $^{^{19}}$ The adaptation of heritage conservation system is extensively discussed in the Article 2 in annexes.

demolished, part of the previously developed sites turned into open green spaces or returned to the nature.

The acceptance of shrinkage is a tough challenge everywhere, just the same for Valga. There are still many people remembering that 30 years ago it was really difficult to find a vacant flat in Valga, the town population was younger and cultural life livelier. Nevertheless, Valga seems to be one of the few towns in Estonia where, at least on municipality level, the phenomenon of shrinkage has been acknowledged and town is actively looking for the ways how to react to it.

6.3.1 The Development of Master Plan

Chapter 1.5.3 describes the role of a master plan within the urban regeneration policy. The need to review the last master plan from 2007 occurred in Valga quickly. The plan from 2007 was approved in the period of an economic boom. Like similar plans from this epoch in other towns, those strategic documents planned the growth of the urban territory. It foresaw new residential and industrial districts to be developed on the greenfield areas on the outskirts of the town. In a context of population decline such a possibility to occupy new areas have a direct negative impact on the existing urban fabric. As an example, one of the largest investments in Valga from recent years can be pointed out here. The Ministry of Education planned to build a new campus for the Vocational Training Centre in Valga. As the state owned a greenfield site at the edge of the city and the masterplan saw this area as developable, two modern buildings were completed there in 2011: a schoolhouse and the student dormitories. The complex meets all the day-to-day needs of the students and they have no need to visit the town centre. The buildings previously occupied by the training centre at the heart of the town were left empty and handed over to local government. Most of them have not been used till today.

The process of the development of the new master plan for the years 2030+ was initiated by Valga City Council in the spring of 2016. To this day, it is the only master plan in Estonia which aims to adapt the town territory to shrinking population. The goals of the plan were set as following:

- more compact town territory;
- revitalized and denser town centre;
- concentration of public functions in the centre;
- greener public space outside the centre;
- urban space adapted to aging population;
- urban space friendly for pedestrians and cyclists.

To get the best available know-how the plan has been developed with the assistance of the Association of Estonian Planners. As the topic of planning for shrinking was new and actual in Estonian context, the planning community was interested in participating in the process. During the composition several public discussions and seminars were organized with the aim to disseminate the information about the actual situation and the future potentials of the town among residents. To boost the restoration of neighbourhood identity, the borders of different historical neighbourhoods were officially specified.

New special conditions for heritage conservation area are obligatory to elaborate when composing a new master plan. Valga town government used the opportunity and decided to develop special conditions together with the National Heritage Board²⁰.

²⁰ More detailed information about Valga special conditions is available in the Article 2 in annexes.

The conditions were composed with much more detail than officially required with the goal to reduce the price of design works for the building owners. In the case of structures within the conservation area the special conditions of the whole conservation area replace the special conditions for the restoration of an individual building. As such the property owner is not obliged to order them separately.

6.3.2 Building Demolition

Building demolition, as one of the urban regeneration tools that local government can apply, is described in Chapter 1.5.5. With the help of the demolitions, Valga town government aims to adapt the building stock to the need of the town actual population.

The succession of structures to be removed is generally chosen in accordance with the danger and visual disturbance they present to the surroundings. Local government has started to use demolitions regularly since 2015, when the first three ugliest abandoned buildings were removed. Earlier officials used the argument that buildings are in private possession and the owner is responsible for their safety as an excuse for the inactivity of public administration. Residents have responded well to the demolition works and these activities have been covered in the local newspaper in a positive way. For locals the first wave of structures removal symbolized that something was starting to change. The former dormitory for railway workers (address Pikk 21A) was among the first to be removed (Figure 10).

Since 2015, Valga municipality has managed to demolish three buildings a year on average. Residents would welcome faster demolition tempo, however, a more rapid proceeding is limited by complicated ownership of abandoned houses. Within private ownership status two types of residential buildings can be distinguished: buildings privately owned or co-owned as a whole and apartment buildings privatized by apartment units. In the case of owned or co-owned buildings, local government offers the owner(s) one of the following options: take-over, authorisation agreement or purchase of the property²¹.

The second type of residential buildings according to their ownership status is much more complicated to deal with, as buildings often have tens of owners, apartments can be mortgaged, indebted, and some owners live abroad. Valga municipality has developed a strategy how to remove these structures as well. The municipality orders a technical expert analysis of the building which declares it unsuitable to inhabit, withdraws the right of use from the building and orders a real estate value evaluation of the building. The evaluation result is similar each time: an apartment without the right to be used is worthless, part of the site belonging to the apartment has positive value, but this value is lower than the price of the demolition works and in total the property value is negative. Then owners are asked to hand the worthless apartments over to the municipality or participate in covering the demolition cost. However, some of the apartments could not be transmitted to government's hands as they are indebted. Then the building is demolished²².

There are state subventions for the works. A municipality can apply for help from the Environmental Investment Centre (EIC) for the demolition of structures damaging the landscape (applicable only to old industrial, military and agricultural facilities) or state financing institution KredEx for publicly owned residential premises. However, unsuccessful acquisition of all the apartment units means that the demolition costs need

²¹ Options proposed to owners are described more detailed in the Article 3 in annexes.

²² More detailed description of the process is in the Article 3 in annexes.

to be financed from the municipal budget. The demolished buildings are replaced by low-cost temporary public green areas (Figure 11).

The main barriers inhibiting the process of demolition are: lack of human resources within the town administration for time-consuming negotiations, too strict requirements for demolition subsidies and lack of insolvency legislation which does not allow to write off mortgage from a property even if the chance to realize the property on the market is non-existent²³.



Figure 10. The demolition works of the former dormitory for railway workers (address Pikk 21A) in 2015 (Valga municipality)



Figure 11. Green area left after the demolition of the former dormitory for railway workers (author)

²³ More detailed discussion in the Article 3 in annexes.

6.3.3 Active Housing policy

As explained in Chapter 1.5.6, the public sector in shrinking communities needs to produce active housing policy as long as housing market does not function itself. The housing policy of Valga government consists of apartment building demolition and rental or social housing development. If a sufficient part of housing oversupply is demolished, the value of the rest of properties should recover and the private sector's motivation to invest in housing stock should resume²⁴. The functionality of this premise in Valga could not be confirmed yet as due to the reasons described before, demolition is proceeding too slowly. Six apartment houses have been demolished since 2015 and there is a need to remove approximately fifty more to clear away the oversupply.

Recently the possibility to accelerate the process has occurred. In summer 2019 the Ministry of Finance offered municipalities to take part in "Housing in shrinking regions" pilot project and Valga municipality succeeded to be one of three participating towns (together with Kohtla-Järve and Kiviõli). The necessity to deal with vacant housing on state level grew when municipalities and owners massively started to cede vacant and worthless apartments to the state. The initial phase of the pilot project consists of a detailed inventory during which the occupancy of each apartment should be determined. Ownership constrains problem is planned to be addressed during the second phase of the project. If needed, the ministry will propose changes in the legal system after this phase. The residents from less than half occupied and therefore unsustainable buildings should be relocated to buildings with a future perspective. Some form of compensation is planned for the relocated people or to improve the quality of their new apartments (Ruus & Tintera, 2019). The pilot project is now in preparatory phase and the exact outcomes are not clear yet. Nevertheless, Valga municipality has significant expectations from this project.

To be able to offer quality rental apartments for specialized labour force working in the public sector (teachers, health care staff, administrative labour), Valga town bought one of the cultural monuments (address J. Kuperjanovi 12) in the town centre in 2016 (Figure 12). Restoration works started in spring 2019 and should be finished in 2020. One of the buildings left behind from the moved Vocational Training Centre is planned to be restored and one new to be constructed in the centre to create quality social housing. The design works of both new social apartment houses began in 2018 and the construction works should be finished during 2020. Valga uses state investment support from housing fund development operated by KredEx which covers up to 50% of the costs for the development of all three projects²⁵.

²⁴ This topic is addressed in more detail in the Article 4 in annexes.

²⁵ More detail about the investment support in the Article 3 in annexes.



Figure 12. The cultural monument at J. Kuperjanovi 12 before restoration which will offer quality rental apartments for specialized labour force in the future (Valga municipality)

6.3.4 Historic Building Restoration

One of the Valga administration's important activities to improve the attractiveness of the town centre is in the reuse of historic buildings there. As stated in Chapter 4.4.3 almost half of the cultural monuments within the conservation area have not been in use since 2014. To save those vacant monuments, carrying the memory of place, Valga municipality has acquired three of them since 2014 and now own 11 out of 24 monuments in the city centre. Two monuments are in state possession. The acquisition of the protected structures demonstrates the new behaviour of the municipality. Previously the municipality tried to avoid them as owning a cultural monument creates financial obligations.

Valga administration tries to direct subventions from the state budget and European funds preferably to the restoration of the monuments in the centre. The previously described development of the rental apartment house at J. Kuperjanovi 12 is a good example here. Another monument will be restored in the frames of the state measures designed for the optimization of school network. Priimetsa elementary school is now in a building dating from the Soviet period in the outskirts of the town. As the number of students has dropped considerably, the schoolhouse should be downsized. The municipality has decided to move the school to the monument in the centre instead of the reconstruction of the Soviet structure in the outskirts. The monument at Vabaduse 13 will be connected with a vacant building nearby (Figure 13) and restored. Design works began with the architectural contest in 2017 (Figure 14) and school is planned to be opened in September 2020. The restoration of other two monuments hosting a music school and a youth centre is under preparation.

Generally, Valga administration focuses on monuments with a clear public function and where there is considerable probability to get a subsidy for the restoration works. Former county administrative building from the end of the 18th century at Riia 5 is an exception to this rule. This building, one of the three most valuable erected when Valga first became the county centre, is too important for the history of the town (Figure 15). The roof of the building burned down in winter 2015 and the structure became dangerous. The owner refused to remove the roof and the structure threatened to collapse, so local government acted instead of them and sent them the bill later. As they did not pay, the municipality bought the building at auction to cover the debt. Since then the building has got a new roof and two facades have been renovated (Figure 16). Valga government has no use for the structure yet and is looking for a private developer to finish the renovation.



Figure 13. The cultural monument at Vabaduse 13 (left) with a vacant building nearby hosting Priimetsa School in the future (author)



Figure 14. The visualization of future Priimetsa School at Vabaduse 13 (Lauder Architects)



Figure 15. The cultural monument at Riia 5 before the fire (Valga municipality)



Figure 16. The cultural monument at Riia 5 after partial restoration (Valga municipality)

6.3.5 Urban Space Revitalisation

Chapter 1.5.8 explains the relevance of the urban space revitalization for the reactivation of the buildings in the neighbourhood. Valga itself has experienced positive outcomes of public space investment recently. During the first decade of this century, the banks of the Pedeli river flowing through the town were turned step by step into a large park offering different sport and leisure activities. As a result, the properties around this park became more popular and their real-estate value grew in comparison with the properties elsewhere in the town. Valga municipality is trying to repeat this success in the town centre and has recently been working with two large projects there.

The first project, new Central Square, was accomplished in August 2018. The design process of the area started in 2015 with an architectural competition organized in co-operation with the Estonian Association of Architects in the frames of "Estonia 100 Architecture Programme: Great Public Spaces"²⁶. The task of the competition was to create a new cosy square in the underused public area between the three old streets Riia, Raja and Sepa (Figure 17). The competition was won by Italian architects Franchi + associate. The building costs of 2 million euros were by three quarters covered from the EU funds. The majority of town celebrations and cultural activities have been held in the square since its opening (Figure 18).

The second project is still in the phase of development. An architectural competition to join the urban space of the twin-town was organized in spring 2016 by the town governments of Valga and Valka. Both local governments were looking for a way to re-unite the town urban space that had been split a century ago. Spanish architects from the company Safont-Tria Architects won the contest. Their work was based on the antecedent architectural design of Valga Central Square. It foresees the pedestrian street between Jaani Church in Valga and Lugažu Church in Valka. Valga Central Square will be linked with newly proposed Valka Central Square with this street (Figure 19). The design works were accomplished in summer 2019 and the constructions works should be finished by the end of 2020. The five-million-euro budget is by two thirds covered from the Estonia-Latvia Programme of the European Regional Development Fund.



Figure 17. The area of new Central Square with Jaani Church in the foreground before revitalization (Valga municipality)

²⁶ This programme was worked out to celebrate the 100 anniversary of Estonian Republic by organizing architectural contest for revitalization of 15 Estonian town centres. Eight new Central Squares have been built up till autumn 2019.



Figure 18. Valga Central Square before the concert (Valga municipality)



Figure 19. The design of Valga-Valka pedestrian street with Jaani Church on the right (Safont-Tria Architects)

6.3.6 Barriers Inhibiting Urban Space Redevelopment

Valga municipality uses the spatial policy tools described above in Chapters from 6.3.1 to 6.3.5 with the principal aim to improve the quality of residents' life and thereby to boost the image of the town among locals and potential investors. Better reputation should result in the stabilization of property values and the deceleration of the depopulation. Most of the described actions have still not been accomplished and therefore the scale of interventions has not been sufficient to have a real impact on the town's development. What are most important barriers limiting Valga municipality to act faster?

The first barrier is the lack of human resources within the municipal administration. As depopulation means lower tax income, financial possibilities to hire labour within the administration is limited. Therefore, there are often not enough officials to deal with the problems caused by shrinkage. Overcoming ownership constrains during building demolition described in Chapter 6.3.2 is a good example of activity which needs considerable human resource. To progress faster, Valga municipality would need some assistance from state government.

The second barrier is closely related with the first one and lies in limited subsidies for demolitions. As it is not sometimes possible to acquire all the apartments in a building, state demolition funding cannot be used all the time. The state institutions are afraid of possible legal conflicts and therefore they hesitate to destroy private properties. The speed of the work then largely depends on local budget realities and political priorities. It is quite difficult to communicate the allocation of large local financial resources to demolition work, as the overall image of the activity is not positive.

The lack of insolvency legislation represents the next barrier. Estonian legislation does not allow a law enforcement officer to write off mortgage from a property even if the chance to realize the property on the market is non-existent. Such mortgages burden the property for decades and limit the possibility to dispose of them. The municipality has no possibility to take over the property even if the owner wishes to give it away.

Fourthly, state funding often prefers greenfield investment. This issue is addressed in Chapter 6.3.1 and is explained on the example of the new campus of Vocational Training Centre in Valga.

The private sector's limited possibilities to finance or co-finance building (re-) development is the fifth important barrier. As Estonian banks have low motivation to accept properties in Valga as a collateral for the mortgages, most of the development is based on finances brought to the town from elsewhere. There is a clear need for the state to work out a system to guarantee loans for locals.

Lastly, the current system of heritage protection, which does not prioritize the use of a building, is an important barrier for the town centre redevelopment²⁷.

6.3.7 Regeneration Strategies Implemented Elsewhere in Estonia

The urban regeneration strategies of Valga municipality have been drawn from the experiences of other European cities described by scholars during the last decades (Leetmaa, Kriszan, Nuga, & Burdack, 2015; Kotilainen, Eisto, & Vatanen, 2015; Camarda, Rotondo, & Selicato, 2015; Elzerman & Bontje, 2015; Miota, 2015; Sánchez-Moral, Méndez, & Prada-Trigo, 2015; Prada-Trigo, 2014; Wiechmann & Pallagst, 2012). Most of them were mentioned in the literature overview chapter of the thesis. As discussed several times before, the situation of every town is unique and urban regeneration strategies rely upon local realities, local institutional settings and social capital as well as state economic and legislative environment. Therefore, approaches successful elsewhere do not need necessarily work in Valga. The more local and state settings differ, the less transferable the approaches are.

In its strategies, Valga concentrates primarily on the urban space aspects of regeneration (housing market together with improvement in the quality of life, the environment, and the recovery of heritage). Single examples of urban space interventions appear also elsewhere. The town of Kiviõli is known among Estonians stakeholders as an example of the municipality actively dealing with housing demolitions.

²⁷ This issue is in detail addressed in the Article 2 in annexes.

Their decades-lasting activity has resulted nowadays in slowly rising property values and it has proven- its effectiveness. The "Estonia 100 Architecture Programme: Great Public Spaces" mentioned in Chapter 6.3.5 is another good example of an urban revitalization activity in Estonian shrinking towns. Though, the program developed by the Estonian Association of Architects did not initially focus on shrinking realities, the municipalities of depopulating small towns have showed higher interest in participating. All eight new central squares finished before summer 2019 were built in towns with less than 20,000 people and with a population loss higher than 10% (Elva, Kuresaare, Põlva, Rapla, Rakvere, Tõrva, Valga, Võru) since 2000 and four of them are from the region of South-East Estonia. It proves that the need to improve the attractiveness of the town centre was more urgent for shrinking communities and they hurried to use the opportunity.

Urban regeneration strategies in Valga differ from the presented ones by the complexity of the approach and strategic application of urban interventions to overcome the outcomes of shrinkage. Other shrinking towns in Estonia are not prepared to declare planning for shrinking as their main development strategy yet.

7 Conclusion

7.1 Limitations

The main limitation of the study comes from the fact that Valga is used here as a single case study. As pointed out in Chapter 1.1.3, institutional settings in every municipality are different. Also, legal framework and economic realities differ significantly state by state, even across the European post-soviet region. Therefore, the applicability of Valga town activities needs to be tested elsewhere.

Another limitation lies in the fact that most of Valga's actions have still not been accomplished or the scale of the interventions is not sufficient and therefore it is too soon to judge their real impacts on the future development of the town. This can be demonstrated by the example of the new Central Square in Valga. The location of the square was chosen with the aim to reactivate building stocks within the heritage conservation area in the historical heart of the town. Most of the structures in the neighbourhood were abandoned or underused and the area had lost most of its functions. Valga municipality's location decision was based on the experiences with urban space revitalization from abroad. The process of square has been in use for one year, town festivities and cultural life have moved there, but not a single new cafe, service or shop has opened in the area. One year is a too short time for changes in processes which have been lasting for decades. We need to wait at least the same time as the building process took to realise if the investment in the new square was enough to improve the state of the buildings in its surrounding.

Similarly, Valga's hope that spatial policy would help to improve the town image among locals and potential investors is based only on the theoretical findings from abroad. Only the new generation of Valga residents will be able to evaluate the outcomes of actual activities.

7.2 Future implications

Nowadays Estonian society is turning its attention more and more towards the problems in depopulating regions. Theoretical discussions on the topic have been initiated by Estonian urban planners, geographers and architects but now the discussion has received vivid resonance within Estonian society as a whole. This is confirmed by the fact, that urban space in shrinking towns has been chosen as the topic of Estonian exposition for the Venice Biennale of Architecture 2020. Nevertheless, there is still little practical guidance for local governments in shrinking communities and policy makers on state level. This thesis helps to fill this gap by focusing on the problems of urban space redevelopment.

The thesis aims to influence Estonian urban policy at the state level by pointing out the realities of Valga and the assistance the town is expecting from state institutions. Valga's experiences show that due to the small size of Estonian administration, this goal is not unduly ambitious.

7.3 Significance

The drivers of population movement are global and small depopulating communities cannot control them. This thesis demonstrates by example of Valga town that this fact cannot be used by local governments as an argument for their passivity or as a reason to give up. The strong leadership of local governments is important to tackle the adverse outcomes of shrinkage. The premise for the leadership is acceptance and a deep understanding of the shrinking process by local stakeholders. On the other hand, no town is able tackle problems related to shrinkage alone - support from the state level is needed. To get the state institutions' assistance, local government must be able to frame its requirements and be prepared to declare with them publicly. Valga case shows, that this strategy of open shrinking policy works in Estonian context. The town has earned the reputation of a municipality dealing actively with the outcomes of shrinkage which helped it to become a considerable partner for the state institutions. The new "Housing in shrinking regions" pilot project developed by the Ministry of Finance described in Chapter 6.3.3 is one of the examples that Valga has gained influence.

Shrinking municipalities need to concentrate primarily on the quality of life they are offering their residents. The attractiveness of urban space is important to achieve this goal. The psychological bond between an individual and their place of residence significantly affects the individual's activity in the community and unattractive environment undermines such bonds. This thesis offers possible spatial policy tools that a municipality can operate with considering post-socialist realities such as lower level of economic development, higher share of private housing, smaller state assistance, and more limited financial resources.

The findings presented in the thesis underline the role of emotions in urban planning, local economy, and heritage protection as well as in other aspects of urban development. Urban brownfields influence life in their neighbourhood as they carry strong symbolic value of decay. Our society is not able to protect its building heritage if locals do not feel well living among the protected structures. And if the centre is not attractive to the citizens, the whole town's economy also suffers. People doubting about the future of the town are not prepared to participate actively in its development. The urban policy in shrinking communities must focus on the creation of the future perspective for the inhabitants.

7.4 Specific Recommendations for Urban Regeneration in Shrinking Towns

Improvement in the quality of life, the environment, and the recovery of heritage compose an important part of urban revitalization strategies to overcome the outcomes of population shrinkage (Prada-Trigo, 2014) and local municipalities should not focus solely on the development of economy and employment underestimating the role of urban space interventions. The acceptance of the shrinkage phenomenon is the first and indispensable step for urban recovery followed by the need for deep understanding of local drivers and the outcomes of population decline.

Population shrinkage has multiple negative impacts on urban development and local municipalities need assistance from upper governmental levels to face them. To get the assistance municipalities must become serious partners for the state institutions. This requires the elaboration of a clear regeneration strategy and readiness to communicate it publicly and openly. The process of the development of the master plan,

if correctly made, can be a good platform to form and articulate the local needs and to present them to the relevant bodies of state government.

Urban space interventions for shrinking communities consist of the following activities:

- building demolition;
- active housing policy;
- historic building restoration;
- urban space revitalisation.

None of those activities is able to change the future perspective of the town alone and even together they compose only a part of urban revitalization strategies to overcome the outcomes of population shrinkage. But they need to be addressed and the role of local government is indispensable in it. The quality and attractiveness of urban space matters, especially in shrinking communities.

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Abstract Urban Regeneration Strategies for Shrinking Post-Soviet European Communities: A Case Study of Valga, Estonia

This doctoral thesis maps the possibilities of local governments to react to the negative outcomes of shrinking population on urban space in the town. Also, it focuses on the spatial policy tools, that can be developed by the municipality, to make urban space more attractive and to redevelop the urban brownfields in the city. The thesis works with the hypothesis that the influence of urban space on citizens' bond with their hometown is substantial and thus, the improvement of the quality of urban space plays a key role in the governance of urban shrinkage. A critical question the thesis poses is: What spatial policy tools can municipalities in small shrinking communities of post-socialist Europe use to advance urban brownfield redevelopment in their territories?

The case study of a small Estonian town of Valga is used for this purpose. Valga can be used as a strategic example due to its long-lasting struggle with population loss leading to property disinvestment and vacancy, current elaboration process of the comprehensive plan which aims to adapt urban space to a shrinking population, and the municipality's reputation in Estonia as an example of local government developing innovative housing policy. The author of the thesis has assisted local government in Valga since 2013 as a public space specialist and has been actively involved in various aspects of local planning. Field observation, interviews and knowledge of local planning policy gained during the period facilitated a deeper understanding of the town's built environment, historic resources, and property conditions.

This work gives a set of applicable lessons and recommendations to local governments in small shrinking communities to improve their spatial policy strategies for urban brownfield revitalisation as well as for the adaptation of state-wide regulations to shrinking town realities. Recommendations consider country's post-socialist realities such as lower level of economic development, higher share of private housing, smaller state assistance and more limited financial resources. The work should help to initiate a wider discussion of possible assistance that Estonian state and society could propose to depopulating communities.

The drivers of population movement are global and small depopulating communities cannot control them. This thesis demonstrates that this fact cannot be used by local governments as an argument for their passivity or as a reason to give up. The strong leadership of local governments is important to tackle the outcomes of shrinkage. The premise for this leadership is acceptance and a deep understanding of the shrinking process by local stakeholders. On the other hand, no town is able tackle problems related to shrinkage alone, support from state level is needed. To get the state institutions' assistance, local government must be able to frame its requirements and be prepared to declare them publicly.

Shrinking municipalities need to concentrate primarily on the quality of life of their residents. The attractiveness of urban space is important to achieve this goal. The psychological bond between an individual and their place of residence significantly affects the individual's activity in the community and an unattractive environment undermines these bonds. The findings presented in the thesis underline the role of emotions in urban planning, local economy and heritage protection, as well as in other aspects of urban development. Urban brownfields influence people's lives in their neighbourhoods as they carry strong symbolic value of decay. Our society is not able to

protect its building heritage if locals do not feel good living among the protected structures. And if the centre is not attractive to the citizens, the whole town's economy also suffers. People doubting about the future of the town are not prepared to participate actively in its development.

As most of the post-socialist countries in Eastern Europe have experienced similar transformation processes following the fall of the Berlin wall and collapse of the Soviet Union, they have had similar institutional settings and market conditions as Estonia. As such, Valga experiences are also valuable for local governments in the shrinking communities of other Eastern European countries.

Lühikokkuvõte Kahanevate linnade elukeskkonna taaselustamine Valga linna näitel

Käesolev doktoritöö kaardistab kohalike omavalitsuste võimalusi reageerida elanikkonna kahanemisega kaasnevatele negatiivsetele tagajärgedele linnaruumis. Töö keskendub ruumipoliitilistele vahenditele, mida saab omavalitsus kasutada, selleks et linnaruum muutuks atraktiivsemaks ja mahajäetud ning alakasutatud piirkondi oleks linnas vähem. Väitekiri lähtub hüpoteesist, et linnaruumi mõju kodanike sidemetele oma kodulinnaga on märkimisväärne ning seega mängib linnaruumi kvaliteedi paranemine võtmerolli kahanevas planeerimises. Kriitiline küsimus, mida väitekiri esitab, on: milliseid ruumipoliitilisi vahendeid saavad kasutada omavalitused väikestes kahanevates linnades oma mahajäetud ja alakasutatud alade taaskasutusele võtmiseks postsotsialistliku Euroopa konteksti arvestades?

Püstitatud küsimusele vastamiseks kasutatakse Valga juhtumiuuringut. Valga sobib strateegilise näitena tänu oma pikaajalisele võitlusele rahvastiku kahanemisega. Elanikkonna kahanemise tagajärjel on Valga linnaruumis palju mahajäetud ja räämas hooneid. Valga omavalitsusel on olemas arengustrateegia probleemi leevendamiseks, selle eesmärk on kohandada linnaruumi kahaneva elanikkonna vajaduste järgi. Antud strateegia tõi viimaste aastate jooksul Valgale Eestis aktiivse omavalitsuse maine. Väitekirja autor on alates 2013. aastast abistanud Valga kohalikku omavalitsust avaliku ruumi spetsialistina ning on aktiivselt osalenud omavalitsuse planeerimisprotsessis. Autori vaatlused, intervjuud ja teadmised kohaliku planeerimispoliitika kohta hõlbustasid sügavamat arusaamist linna ehitatud keskkonnast, ajaloolistest ressurssidest ja hoonete omanditingimustest.

Väitekiri annab kohalikele omavalitsustele väikestes kahanevates linnades rakendatavaid nõuandeid ja soovitusi, kuidas parandada oma ruumilisi poliitikastrateegiaid mahajäetud ja alakasutatud alade taaselustamiseks ja riigiaparaadile soovitusi regulatsioonide kohandamiseks kahanevate omavalitsuste vajaduste järgi. Soovitused lähtuvad Eesti spetsiifilisest kontekstist, nagu majandusarengu madalam tase, erasektori suurem osakaal eluasemefondist, väiksem riiklik tugi omavalitsusele ja avaliku sektori piiratud rahalised vahendid. Töö soovib algatada laiemat arutelu teemal, mida Eesti riik ja ühiskond saaksid teha kahanevate linnade elanike jaoks.

Põhjused, miks inimesed migreeruvad, on globaalsed ja väikesed kahanevad kogukonnad ei ole võimelised neid kontrollima. Kuid see ei tähenda, et asjaolu saavad kohalikud omavalitsused kasutada argumendina oma passiivsuse põhjendamiseks. Kohalike omavalitsuste tugev juhtroll on oluline kahanemise tagajärgedega võitlemisel. Selle juhtrolli eeldus on kahanemise aktsepteerimine ja sügav arusaam sellest protsessist kohaliku kogukonna poolt. Samal ajal ükski kahanev linn ei ole võimeline oma saatusega üksi hakkama saama, tal on vaja riigi- poolset tuge. Riigiasutuste abi saamiseks peab kohalik omavalitsus suutma oma vajadusi kaardistada ja olema valmis nende avalikuks esitamiseks.

Kahanevad omavalitsused peavad keskenduma eelkõige oma elanike elukvaliteedile. Linnaruumi atraktiivsus on selle eesmärgi saavutamiseks oluline. Psühholoogiline side inimese ja tema elukoha vahel mõjutab oluliselt tema tegevust kogukonnas ning ebaatraktiivne keskkond õõnestab seda sidet. Väitekirjas esitatud väited rõhutavad emotsioonide rolli linnaplaneerimises, kohalikus majanduses, muinsuskaitses ja teistes linnaarengu aspektides. Mahajäetud ja alakasutatud hooned mõjutavad inimeste elu nende naabruskonnas, kuna neil on tugev negatiivne sümboolne väärtus. Meie ühiskond ei ole võimeline oma ehituspärandit kaitsma, kui kohalikud ei tunne end kaitstavate struktuuride hulgas hästi. Ja kui kesklinn ei ole kodanikele atraktiivne, kannatab ka kogu linna majandus. Inimesed, kes kahtlevad linna tulevikus, ei ole valmis selle arengus aktiivselt osalema.

Kuna enamik Ida- Euroopa postsotsialistlikke riike on Berliini müüri langemise ja Nõukogude Liidu kokkuvarisemise järel kogenud sarnaseid transformatsiooniprotsesse, on neil sarnased institutsionaalsed ja turutingimused nagu Eestil. Seetõttu on Valga kogemused väärtuslikud ka kohalikele omavalitsustele teistes Ida- Euroopa kahanevates linnades.

Appendix

Article 1

Tintera, J., Ruus, A., Tohvri, E., & Kotval, Z. (2014). Urban Brownfields in Estonia: Scope, Consequences and Redevelopment Barriers as Perceived by Local Governments. Moravian Geographical Reports, 22 (4), 25–38.
URBAN BROWNFIELDS IN ESTONIA: SCOPE, CONSEQUENCES AND REDEVELOPMENT BARRIERS AS PERCEIVED BY LOCAL GOVERNMENTS

Jiří TINTĚRA, Aime RUUS, Epi TOHVRI, Zenia KOTVAL

Abstract

Awareness of brownfields is limited in Estonia. In fact, there is no specific term officially used for brownfields at present. The aim of this study is to examine concerns in the redevelopment of brownfields and to present preliminary findings regarding the scope, consequences and redevelopment barriers of Estonian urban brownfields, as perceived and assessed by local authorities. The perceived importance of the negative impacts of brownfields on urban space is more than the mere number of brownfields and their total area, as it is influenced by the presence of other negative socioeconomic phenomena, such as local unemployment or population decline. According to municipal authorities, major barriers to the redevelopment of Estonian urban brownfields, besides the economic issues, are both the lack of knowledge regarding state and local measures and tools to help the public sector deal with brownfields, and the common perception that brownfields re-development is a private sector issue.

Shrnutí

Urbánní brownfieldy v Estonsku: rozsah, dopady a revitalizační bariéry z pohledu městských samospráv

Povědomí o problematice brownfields je v Estonsku slabé, dodnes pro ně neexistuje žádný konkrétní oficiální termín. Cílem této práce je prozkoumat zájem městských samospráv o regeneraci brownfields a analyzovat rozsah, dopady a bariéry rozvoje urbánních brownfields v Estonsku ve vnímání a hodnocení místních samospráv. Vnímaná důležitost negativních dopadů brownfields je spíše než množstvím a rozlohou brownfields ve městech ovlivněna přítomností dalších negativních socioekonomických jevů jako lokální nezaměstnanost či úbytek populace. Podle samospráv obcí představují kromě ekonomických faktorů hlavní překážky regenerace městských brownfields v Estonsku jednak nedostatek znalostí možných nástrojů k podpoře regenerace brownfields ze strany statní správy a samospráv a také široce rozšířený názor, že regenerace brownfields má být záležitostí soukromého sektoru.

Keywords: urban brownfields, sustainability, land management, legal definition, negative impacts, barriers to development, Estonia

1. Introduction

After the collapse of the Soviet Union in the early 1990s and similarly with other Baltic countries, Estonia went through radical structural changes in its economy and politics. As a result, an increasing number of urban brownfields emerged. Despite this fact, abandoned urban space is only seldom re-used for new development. Due to its economic growth, accession to the European Union and access to the EU structural funds, Estonia is now reaching the point where it would be able to start to deal with brownfields redevelopment. Awareness of brownfields, however, their opportunities and constraints, remains fairly limited in Estonia. Currently, there is no specific term or legal definition for brownfields in the Estonian language. Drawing on the experience of other countries, it is possible to assume that local governments, which are on the frontline when it comes to dealing with negative impacts of the presence of brownfields in their administrative area, will also be the first to show interest in brownfields regeneration (CABERNET, 2006).

Given this background, the aims of this study are to examine local governments' interest in brownfields regeneration in Estonia, to present preliminary data regarding the extent and the perception of Estonian urban brownfields and their redevelopment from the perspective of municipal governments, as well as to understand public sector concerns and issues related to such redevelopment. Drawing on Estonian survey-based research, this research will show the scale and nature of urban brownfield redevelopment problems that municipalities of former Soviet countries are facing, and will highlight the most affected towns. The critical question is: Does the presence of brownfield sites have any impact on the quality of life in Estonian towns?

This paper seeks to answer this main question from four different aspects:

- 1. How do local governments perceive the extent, cause and nature of brownfields in Estonian towns?
- 2. What geographical and socioeconomic factors affect the spatial diffusion and extent of brownfield areas in towns?
- What do local governments perceive as the most important negative impacts of brownfields on local communities' quality of life and how significant are these impacts? and
- 4. What do local government officials consider to be the main barriers to redevelopment of urban brownfields?

Once answered, these questions can begin to provide a sense of the magnitude and nature of the brownfield redevelopment tasks, and could serve as a starting point for possible future policy of brownfields redevelopment in Estonia. Responses to these questions were collected from survey data and interviews with local government officials. The feedback received also contains implications for future research and planning, providing an initial empirical basis for assessing the scale of the problem of brownfields in Estonian towns, and the resulting problems that municipal governments face.

2. Urban brownfields redevelopment

Successful redevelopment of urban brownfields requires effective public and private sector cooperation. Redeveloping a brownfield is far more complicated and difficult than building a new structure on a greenfield site. Benefits gained by the local community from such redevelopment, however, could be immense: from financial advantages (tax income from the site) to qualitative factors, such as environmental clean-up and an improved quality of life. The attitudes of the community towards redevelopment are critical (Kotval and Mullin, 2009), and local governments have a key role in shaping these attitudes. For successful brownfield redevelopment, local authorities need to be able to communicate factually and openly with local residents about potential risks of such redevelopment (Eiser et al., 2007). Local authority regulators are one of key stakeholders involved in the redevelopment of brownfield sites (Williams and Dair, 2007).

CABERNET (Concerted Action on Brownfield and Economic Regeneration Network) is a European multistakeholder network that focuses on the complex issues that are raised by brownfields regeneration. CABERNET, in its report "Sustainable Brownfields Regeneration", describes key governance and institutional issues in the regeneration of brownfields. This report also highlights the fact that municipal governments are one of the key decision makers with an impact on brownfields regeneration processes. "Municipalities' actions, or indeed inaction, can have impact on the manner and pace at which brownfield land is brought back into use, or the degree to which it might remain underused or derelict. Therefore, there is a strong need for a brownfield specific strategic approach for regeneration at the local government level" (CABERNET, 2006).

Among a number of issues that need to be considered when reviewing the role of municipalities, this report states that two of the key problems are a low awareness of the issue among municipal governments, and a lack of adequate knowledge about the scale of the problem. The report further underlines the need of policy makers and developers for reliable and up-to-date information in order to facilitate the re-use of land. It highlights the importance of national land use databases, which would incorporate both the extent and the nature of brownfield lands. Such databases would help member states to deal with the problem of brownfield sites and would be useful "in taking advantage of the opportunities for increased competitiveness presented by successful brownfields regeneration and urban land management" (CABERNET, 2006).

Oliver et al. (2006) divide EU countries into three groups – by competitiveness and population density. The first group is represented by the Scandinavian countries and Ireland. These countries, with a high level of competitiveness and relatively low population density, focus on the regeneration of brownfields by resolving the issues of contamination. In the second group, represented by Western European countries such as Germany and France, high population densities and the lack of available greenfield sites has already created a priority for land regeneration through brownfields redevelopment. The third group is represented mostly by the EU member states from the Mediterranean region and Eastern Europe. These countries have medium relative population densities and a relatively low competitiveness. Due to a lack of any contact with the CABERNET network, Estonia is not mentioned among the selected countries in the CABERNET report. Considering its current state of economic development and past economic structural change, however, it can be presumed that Estonia, despite its low density of population, would be classified in the third group: "It is perhaps these countries [from the third group] that have the most to gain from maximizing the potential for creating more competitive cities that are available through the successful regeneration of urban brownfield land" (Oliver et al., 2006).

This paper reacts to the CABERNET network's recommendations and aims to deliver preliminary findings enabling the establishment of an Estonian national land use database in the future. It also shows local governments' perceptions and awareness of the brownfield issue. The first step towards dealing with the 'brownfield issue' in Estonia is to give it a name. Currently, there is no specific term for brownfields in the Estonian language. Mostly, some equivalent to spoiled or polluted area is used. The term 'tühermaa', which could be translated as a bare or empty plot of land, is noticed more frequently. This term has not been clearly defined yet, however, nor is it exclusively used for brownfield sites. Therefore, for the purposes of the present study, the international term 'brownfield' is used.

The second step towards understanding the full dimensions of the 'brownfield issue' is to define the term. Defining the term and evaluating the problems associated with it makes an essential contribution to its solution (Alker et al., 2000; Adams, De Sousa and Tiesdell, 2010). The definition and the approach to deal with brownfields differ by country and are developing over time (Adams, De Sousa and Tiesdell, 2010; Thornton et al., 2007). While in most of the EU member countries the concept of brownfields as previously-developed land is prevalent (Oliver et al., 2006; ODPM, 2005), both in North America and Australia definitions continue to refer to both known and potentiallycontaminated sites (Adams, De Sousa and Tiesdell, 2010). Even in these countries, the focus is shifting from mostly 'contaminated areas' towards 'previously developed land' (Hula and Bromley-Trujillo, 2010; Susilawati and Thomas, 2012). Initially, the term brownfield was associated primarily with urban regeneration, which later began to cover rural areas, too (Frantál et al., 2013). At the moment, there is no standard definition for brownfields across the EU, and legal definitions differ from one EU member state to another (CABERNET, 2006; Oliver et al., 2006). CABERNET, as one of the first approaches at a European level to unify the term, defines brownfields as sites that: (i) have been affected by the former uses of the site and surrounding land; (ii) are derelict or under-used and may have real or perceived contamination problems; (iii) are mainly situated in developed urban areas; and (iv) require intervention to bring them back to beneficial use.

In a similar way that an Estonian term for brownfields is lacking, there is still no legal or commonly-used definition for a brownfield site, either. The concept of brownfields as being previously-developed land seemed to be more appropriate for the Estonian context, and hence the definition elaborated by CABERNET has been used in this study. The definition specifies urban brownfields, but in the context of Estonia, referring solely to urban areas could be problematic. Due to various economic transformation processes in its recent past, Estonia has been left to deal with a number of derelict former agricultural complexes from the socialist era. These are mainly 'Kolkhozes' (collective farms) and 'Sovkhozes' (farms of collective management). These complexes are situated mostly in the countryside, outside of larger settlements. Narrowing down the definition to only sites in the developed urban areas would ignore the reality of Estonian brownfield sites, and could be a limiting factor in finding a successful solution.

The presence of unused, derelict areas and deteriorated buildings within the compact pattern of a town reduces the attractiveness of a site. It also reduces the value of land and properties in the neighbourhood for potential investors, the existing business sector, as well as for residents. Economic and environmental problems may occur and accumulate in the area and it may start to contrast sharply with both stabilized and new development zones. A large number of brownfields on the administrative territory of a town aggravates problems and may make the area, as a whole, unattractive both for investors and residents. This could lead to growing unemployment and decreasing population (Susilawati and Thomas, 2012). Urban sprawl into outlying green spaces, a hollow urban core and redundant infrastructure, are further products of the missing brownfield policy (Brill, 2009). Unattractive environments, especially if marked by derelict buildings and overgrown lots, detract from the beauty of the surroundings, and give the place an air of neglect. This affects residents' pride, their sense of identity and the perception of attachment to the neighbourhood, which are important for possible future improvements in such areas. Letang and Taylor (2012) state that from the perspective of residents, improved environmental aesthetics are one of the most desired outcomes of successful brownfield redevelopment. The main types of problems caused by or negatively influenced by the presence of brownfields can be listed as follows: economic, financial, spatial, environmental and social. For the purposes of this study, the categorization by Kadeřábková and Piecha (2009), of brownfield's negative impacts on the quality of life within towns, was adapted for use in the questionnaire used (see results in Tab. 3, below).

Compared with greenfield sites, brownfields are often not economically competitive for regeneration without public intervention. Various authors discussing brownfields have identified a number of barriers to redevelopment that may be addressed through government policies. Susilawati and Thomas (2012) see the public perception of brownfields sites as contaminated as one of the main barriers to brownfield redevelopment, even when it is not necessarily the case. Whitney (2003) notes two main barriers: the cost of cleanup and legal concerns. De Sousa (2006) conceptualizes the main constraints on brownfields redevelopment as falling under three categories: development barriers, governance issues and neighbourhood-based drawbacks or under planning/regulatory constraints, physical and ownership constraints (Adams, De Sousa and Tiesdell, 2010). Economic, environmental and social barriers are often present at the sites, hindering the return of brownfields to beneficial use. Public incentives could make brownfields regeneration more attractive. Two types of incentives are applicable: financial incentives including direct and indirect funding, and legal incentives including spatial planning and regulatory drivers (Thornton, 2007).

The present study examines local governments' perceptions of the main constraints that need to be addressed in relation to improving overall brownfield policies in Estonia, and in providing public incentives for undertaking brownfields redevelopment. For the purposes of this study, a list of the development barriers and governance issues relating to brownfields redevelopment, based on De Sousa's (2006) categories, has been incorporated into the questionnaire. The importance of each barrier has also been examined (see results in Tab. 4, below).

Frantál et al. (2013) show that brownfields located in municipalities with a higher local development potential are more likely to be redeveloped. There are different geographical and socioeconomic indicators that can characterize the development potential of a municipality. The results of this study are interpreted in relation to these two types of indicators: (a) geographical indicators – town size, population and proximity to Estonia's capital city, Tallinn; and (b) socioeconomic factors, including the relative changes in population and registered unemployment.

3. Geographical context of the study

Estonia is a small country in the Baltic region of Northern Europe. With a population of 1,339,662 (January 1, 2012) and a total area of 45,227 km² its population density is 31 inhabitants per km². The Estonian territory is divided administratively into fifteen counties and 226 administrative units managed by local governments, including 33 towns, 193 rural municipalities and fourteen towns without municipal status (ES, 2012). The populations of all 47 towns (with or without municipal status) vary from 1,040 to 397,617 inhabitants. Fourteen towns have a population of more than 10,000 inhabitants and six of them more than 20,000 (Fig. 1). Population is distributed unevenly. with a higher density in northern parts of the country. The location and size of Estonian towns mirror the distribution of population. Apart from the capital of Tallinn in Harju County and the towns of Tartu (Tartu County) and Pärnu (Pärnu County), all other larger towns are concentrated in the East-Viru County in the most north-eastern part of Estonia (Fig. 1).

Since the collapse of the Soviet Union, the size of the Estonian population has continually decreased. According to the 2011 Population and Housing Census, 1,294,455 permanent residents lived in Estonia. Compared to the previous census of 2000, the population of Estonia decreased by 75,597 persons, i.e. by 5.5%. The census results also indicate the continuing concentration of the population around major cities. This is mainly occurring around the capital of Tallinn, but also around the towns of Tartu and Pärnu. These shifting population densities have resulted in the general shrinkage of Estonian towns (ES, 2013b). There are only three towns (Saue, Maardu, Keila), where the population has increased between the two censuses. All of them are situated in relative close proximity of the capital and their growth can be explained as an effect of urban sprawl (Roose, Kull, Gauk and Tali, 2013). In the remaining towns, the population has decreased. Compared to 2000, the decrease in population has been the most notable in smaller towns (Fig. 2). Mőisaküla, Kallaste and Püssi were the most affected towns, losing 29.2%, 29.7% and 42.1% of their population, respectively. Tallinn, the capital city, and Tartu, the second largest city, have lost only a moderate 1.8% and 3.5%, respectively (ES, 2013b).

The socioeconomic situation of Estonian regions varies significantly. This can be demonstrated by the distribution of registered unemployment across the country. Looking at other socio-economic parameters, such as median household income or the number of persons living below the poverty line



Fig. 1: Population of counties and urban settlements (January 1, 2012) Source: ES (2012); Graphic courtesy of Statistics Estonia (2012)



Fig. 2: Relative change in the population of Estonia (31.03.2000–31.12.2011) Source: ES (2013a); Graphic courtesy of Statistics Estonia

(Letang and Taylor, 2012), would show similar distributions. Areas most affected by unemployment are the regions of the East-Viru County (towns of Narva, Kohtla-Järve, Silamäe, Jőhvi, Kiviðli, Püssi) and the Valga County (town of Valga). The lowest rates are recorded in the Viljandi County and the Jőgeva County (Fig. 3). The East-Viru County is historically a highly industrialized region with large deposits of oil shale and a concentration of heavy industry. The population of the East-Viru County amounts to 166,548, constituting 12.6% of the total Estonian population. Although the Valga County is a rural region on the border between Estonia and Latvia with a population of 34,135 inhabitants, the town of Valga itself has a strong industrial and military past.

Knowledge about brownfields, their opportunities and constraints, is fairly limited in Estonia. The Estonian government has shown a certain interest in the issue and awareness of the problem, however. The National Environmental Action plan of Estonia for 2007–2013, published by the Ministry of the Environment, states that under the planned action 1.8.3.2, there is a need for 'the elaboration of the principles of financing the cultivation, restoration and arrangement of spoilt areas and elimination



Fig. 3: Registered unemployment in Estonia (2011) Data sources: ES (2013a); Graphic courtesy of Statistics Estonia

of littering objects', and under action 1.8.3.3 a need for 'the support for arrangement of spoilt and polluted areas (e.g. military areas, quarries, peat production areas, agricultural areas, etc.)' (Ministry of the Environment, 2008). In the national governmental Action Programme for 2012–2015, the need for establishing a national land pollution database, creating measures to reduce ownership constraints and enabling funding from state sources, is mentioned (Eesti Vabariigi Valitsus, 2011).

While these intentions continue to be nothing more than just plans, one already-functioning action can be pointed out. Site owners now have the possibility to apply for a grant from the government agency Environmental Investment Centre (EIC) for the 'demolition of structures damaging the landscape' within their property. This measure corresponds well with Letang and Taylor's (2012) concept of improving environmental aesthetics, as pointed out above. Since this measure is applicable only to old industrial, military and agricultural facilities situated outside of urban areas or in their periphery, however, it can be a tool for remediating only a small part of urban brownfield sites.

4. Data and methods

To gain an overview of how aware the government is of the brownfield problem, certain state institutions were contacted. The Ministry of the Environment, the Ministry of Economy and Communication, the Ministry of the Interior and the Estonian Land Board were asked for written contributions and comments. The Ministry of Economy and Communication and the Ministry of the Interior were responsive, both pointing out a real need to analyse the issue of urban brownfields in Estonia and giving their full support to this study. At the same time, however, they underlined the fact that in Estonia, it is local governments that are primarily responsible for local spatial development planning. As a result of the 'absent' brownfield policy and uncertainty as to who is responsible for it, there is not any clear and united approach among Estonian stakeholders in the propagation of brownfields redevelopment.

Neither the state nor the local governments have an accurate picture of the extent of urban brownfields within their territories. Due to the missing definition for brownfields, a systematic inventory of brownfields is difficult to conduct. Brownfield areas in current local comprehensive plans and master plans are mainly marked according to their last use or - less frequently - according to their intended use. Such plans do not give any information about their actual use, however. Presuming that town government officials responsible for environmental protection or planning are those who are aware of possible brownfield areas in their towns, our survey targetted local governments for information on urban brownfields. Roose, Kull, Gauk and Tali (2013) give a deeper overview of the actual state of land use planning in Estonia, the role of local governments in this process and limits to their activities. Data for this study were gathered between December 2011 and July 2012 from mail-out questionnaires and visits to 47 Estonian towns. These 47 towns included all Estonian towns with or without the municipal status. In order to help local governments become more willing to participate in the research, written support letters from the Ministry of Economy and Communication, the Ministry of the Interior and Estonian Town Association (ELL) were mailed in the autumn of 2011.

A modified and translated CABERNET definition of brownfields was part of a mail-out questionnaire for local government officials. The questionnaire comprised eleven questions designed to identify or determine:

- possible previous brownfield redevelopment policies in town governance;
- local government's perception of the extent and nature of local brownfield sites;
- preferences for the future use of brownfield land;
- relative importance of actual new construction on brownfield land;
- importance of negative impacts of brownfield sites on local life;

- types of negative impacts on local life; and
- · barriers inhibiting redevelopment of urban brownfields.

For questions in parts five to seven, respondents were asked to choose three answers from the given list and mark with three (3) points as the most important, two (2) points as the second most important, and with one (1) point as the third most important option. The option "other", requiring further comments was also available.

The questionnaires were first mailed out in December 2011, using the Estonian Town Association's mailing list. They were mainly sent to officials responsible for environmental protection or planning in town government bodies. As not all Estonian towns are members of ELL, an official University e-mail was sent to non-members in January 2012. Follow up e-mails were sent in March and April 2012. The e-mails attempted to target officials at higher positions who were responsible for planning. In the case of small towns, this might have even been the mayor. Throughout the data gathering process, researchers were available to receive questions and provide further information and, where necessary, personal visits to stakeholders were offered. In fact, the e-mail sent out in April proposed only the latter. The need for a personal visit occurred only in larger towns. Three towns were visited: Tallinn (twice), Tartu and Maardu. In all cases, one of the contact persons was an official from the department of town planning. In Tartu, a Town Architect and in Maardu, a Deputy Mayor were also present. Interviews were composed of two parts. During the first part, brownfields were delineated on a printed town development plan. Their previous utilization and actual ownership were added. During the second part, questions similar to those in the e-mailed survey were asked. Sections referring to local government's perception of brownfields' negative impact on their town's quality of life and their view of barriers inhibiting redevelopment of urban brownfields, were the focus of the discussions. After each visit, the Estonian Geoportal (GIS system) was used for gaining more precise data regarding the number and size of brownfields in the areas pointed out by local government officials.

In total, data from twenty towns were gathered, with the response rate being 43%. Eighteen of the returned questionnaires included all data asked for. Respondents from the remaining two towns only stated, without filling out the questionnaire, that there were no brownfields in their territory. Officials of larger towns tended to display more interest in the research. Ten out of fifteen towns with a population larger than 10,000 participated in the survey.

Scale and characteristics of urban brownfields in Estonia as perceived by local governments

Respondents were asked whether the redevelopment of brownfields had already been discussed in their town and, if so, with what results. Although ten out of eighteen respondents affirmed that there had been some discussion on this issue, only two of them were able to specify the results. The Paldiski town government official noted that land use was specified for the whole town territory (including brownfields) in the town's master plan. In the case of Sillamäe, removal of contamination from a former large industrial plot and the development of plans for the site were mentioned.

5.1 Estimation of the extent of urban brownfields in Estonia

The study revealed that local governments have a very limited overview of the actual land use in their towns' territory, including the possible presence of brownfields. There are no municipal brownfield inventories. Data about the quantity and areal surface of brownfields presented in this paper are only estimates, the quality of which depends considerably on the accuracy of respondents' survey answers. Although the definition of brownfield was presented in the questionnaires, we cannot presume that all respondents understood the term in the same way. There is a need to improve the depth of knowledge about brownfields among Estonian stakeholders, as this may help to make the term clearer. We assume that large brownfield areas with higher negative impacts on their surroundings were more often detected than smaller ones. And also that the time and effort contributed by the respondents differed significantly. Nevertheless, the results give an idea of the extent of urban brownfields in Estonia.

Local government representatives were asked to estimate the number and size of brownfields in their municipalities. No local governments involved in the research had a formal brownfields inventory from which to derive an estimate. Twenty towns provided an estimated number of brownfield sites; eighteen of them also estimated brownfield area. Responses ranged from zero (Loksa, Suure-Jaani) to 283 (Tallinn), covering from zero to 9.7% (Tamsalu) of their area (Tab. 1).

Although a significant correlation between the relative extent of brownfields in a town (as a % of a total area) and the town size or population was not detected (see Table 2). it is remarkable that the proportion of brownfields in the four largest towns (ranking from 0.5 to 2.2%) is lower than in most of the middle-sized (< 20,000) and smaller towns (see Table 1). Decline in population is strongly associated with the town's location in terms of proximity to the capital city (Pearson's r = -0.596), but none of those factors seem to influence the presence of brownfields in a town. Even registered unemployment is not significantly associated with the estimated size of brownfields (Pearson's r = 0.139). Because of the potential inaccuracy of respondents' estimations of the quantity and areal surface of urban brownfields, an affirmation that the extent of brownfields is not associated with a town's geographical location and its socioeconomic situation would be premature. There is a need for more precise inventories of Estonian brownfields.

Industrial heritage is another important factor influencing the presence of brownfields in a town (Filip and Cocean, 2012). While towns with a strong industrial past (Tamsalu, Maardu, Rakvere, Võhma, Sillamäe, Valga) declare the proportion of their brownfields to be between 5 and 9.7%, less industrialized towns such as Saue, Loksa and Suure-Jaani state that they have practically no brownfields within their territory (Table 1). In the case of towns such as Valga and Rakvere, the former presence of large Soviet bases has likely played an important role in the extent of brownfield sites within these towns.

On average, brownfields in the participating twenty towns occupy approximately 2.5% of urban land. This is less than estimations in De Sousa's (2006) similar study for Canada (3.3%) and USA (6%), but not unusual, given Estonia's different, less industrial, history. Within the participating towns, 695 potential brownfield sites with a total area of 1,152 ha were detected. Assuming that this average percentage of brownfield area is applicable to all 47 Estonian towns, including those not included in the study, approximately 1,000 brownfields with a total of up to about 1,600 ha may be present in the Estonian towns.

Town name	Population ^a	Total area ^b (ha)	Unemployment rate ^d	Population change ^e	Regional location ^g (km)	Number of brownfields ^k	Area of brownfields ^k (ha)	BF as % of total urban area	Perceived importance ^m
Tallinn	397,617	15,827	3.3	- 1.8	0	283	272.0	1.7	2.0
Tartu	102,414	3,880	3.2	- 3.5	186	34	86.0	2.2	3.0
Narva	66,453	8,454	12.6	- 14.6	213	53	117.8	1.4	5.0
Viljandi	20,117	1,462	4.2	- 15.8	161	3	7.2	0.5	2.0
Rakvere	16,612	1,064	5.0	- 10.7	100	120	74.7	7.0	2.0
Maardu	6,549	2,276	5.8	4.7	20	46	218.3	9.6	4.0
Sillamäe	16,392	1,054	8.0	- 17.1	187	2	65.2	6.2	3.0
Kuressaare	14,965	1,495	4.7	- 11.8	220	33	34.5	2.3	4.0
Valga	13,789	1,654	10.7	- 14.4	240	19	93.4	5.6	4.0
Kiviőli	6,749	1,175	11.4	- 23.9	145	22	43.0	3.7	4.0
Rapla	5,641	472	5.9	- 9.7	53	15	n/a	n/a	3.0
Saue	5,142	349	2.9	11.2	22	1	1.4	0.4	1.0
Paldiski	4,154	6,017	8.9	- 3.8	49	17	66.3	1.1	3.0
Kärdla	3,678	450	6.4	- 19.6	158	12	n/a	n/a	2.0
Loksa	3,437	381	7.8	- 21.0	69	0	0.0	0.0	n/a
Tamsalu	2,544	402	7.4	- 14.5	102	18	39.0	9.7	4.0
Vőhma	1,515	193	5.8	- 17.7	132	3	13.1	6.8	3.0
Lihula	1,425	417	7.1	- 10.6	113	11	11.4	2.7	3.0
Suure-Jaani	1,236	223	4.0	- 21.5	145	0	0.0	0.0	n/a
Mőisaküla	1,040	220	4.8	- 29.2	191	3	8.9	4.0	4.0
Total		47,465				695	1,152.2	2.5	3.1

Tab. 1: Geographical and socioeconomic indicators of participating towns and perceived extent of brownfield problem Notes:

^a Statistics Estonia. Data as of 1 January 2012 (ES 2012);

^b Estonian Land Board. Data as of 1 January 2007; ^d Statistics Estonia based on the data of the Estonian Unemployment Insurance Fund. Data for the year 2012 (ES 2013a);

^e Statistics Estonia. Relative population change between the two censuses 2000 and 2011;

^g Estonian Road Administration. The distance of the town from Tallinn. Data as of 30 July 2003 (ES 2013a); ^k Authors' own survey (estimate);

^m Authors' own survey. Perceived Importance of brownfields negative impact on the quality of life (5 = extremely high importance);

^o Total area of Paldiski includes two uninhabited islands (1,287 and 1,160 ha).

	Population	Total area	Unemployment	Population change	Regional location	BF as % of total u. area	Perceived importance
Unemployment	- 0.258	0.031	1.000	- 0.347	0.326	0.139	0.652
Population change	0.304	0.337	- 0.347	1.000	- 0.596	0.003	- 0.411
Regional location	- 0.300	- 0.256	0.326	- 0.596	1.000	- 0.007	0.484
% of total urban area	- 0.183	- 0.246	0.139	0.003	- 0.007	1.000	0.322
Perceived importance	- 0.208	- 0.008	0.652	- 0.411	0.484	0.322	1.000

Tab. 2: Inter-correlation matrix of geographical and socioeconomic indicators and extent of brownfield problem

Given the unstructured selection of the towns participating in this survey, however, this assumption is not necessarily correct and would need to be checked by further research. We can assume though that, in reality, these counts and areas are likely to be higher than those estimated here, as the survey results depended on the ability and willingness of respondents to detect brownfields on their municipal lands.

Similar estimations concerning only urban brownfields in other countries are not available. Oliver et al. (2006) lists the available data for a range of brownfield types in some European countries, and Adams, De Sousa and Tiesdell (2010) for USA and Canada. In Filip and Cocean's (2012) analysis of 60 from 320 Romanian cities, 222 industrial urban brownfields were identified taking up from 0.1 to 17.3% of the administrative area of each city. Note, however, that we have to be aware of limitations in comparing all of these presented data due to the use of varying brownfield definitions (Alker et al., 2000), different study focuses, such as only on urban or only on industrial brownfields, and different data collection methods.

5.2 Structure of Estonia's urban brownfields

Respondents were asked to divide their detected brownfields into groups by former use and ownership. Figure 4 shows that most urban brownfields in Estonia consist of former industrial premises (35%), followed by post-military sites (30.8%), and then residential (18.1%) land. By its area, the former industrial land occupies almost a half (47.9%) of all brownfield areas and the post-military sites occupy almost a quarter (24.3%). The relative importance of the former residential land is relatively low (5%). The majority of brownfield sites are owned by the private sector (63.3% by number and 71.4% by area – Fig. 5). Still, more than one-third (25% by area) of the detected brownfields are in public (municipal or state) ownership. For the rest of the sites, local respondents were not able to specify the actual ownership.

Data relating to the former use of urban brownfields reveal that most of the abandoned sites were previously used for industry. This is in accordance with other countries' experiences (Czech Invest, 2008; De Sousa, 2002). Postmilitary sites, however, constitute an important share of extant brownfields. In the middle of the 1980s, before the collapse of the Soviet Union in 1991, around 122,480 Soviet soldiers were resident in Estonia with their families and service personnel (Pärn, Hergauk and Őun, 2006). When the Soviet troops withdrew in 1994, many military bases were left empty. Most of them were located in rural areas, but some were also in developed urban areas. Typically, those sites remained in the state's possession and when local governments showed any interest, they were transferred to them. This can explain the quite high proportion of public sector ownership of detected brownfields, as compared for example with the situation in the Czech Republic (Czech Invest, 2008).



Fig. 4: Distribution by former land use. Source: authors' survey



Fig. 5: Distribution by ownership. Source: authors' survey

Public ownership can be an advantage for successful redevelopment of brownfield sites, because ownership constraints represent one of the main barriers to redevelopment (Adams, De Sousa and Tiesdell, 2010). Public ownership simplifies the redevelopment of a brownfield site for non-profit use, turning it into a green space, for example (De Sousa, 2003; Franz, Gules and Prey, 2008). It also makes interim or temporary use easier (Rall and Haase, 2011). And lastly, in Estonia, public ownership provides better access to grant funding. The Estonian Environmental Investment Centre (EIC), provides landowners with the possibility to apply for a grant for "the demolition of structures damaging the landscape" from their property. According to EIC rules, private site owners need to co-finance at least 50% of the removal costs. In the case of sites in public possession, 10% of co-investment is acceptable (EIC, 2012).

The process described above can be illustrated by the case of a former military airport situated in Tartu, the second largest town in Estonia. This formerly important Soviet military airport lies partially within the town's borders, the rest lying within the territory of the neighbouring village. The airport was abandoned by the Soviet army in 1992. Service buildings, including barracks, remained empty. The majority of the airport territory is in the state's possession. Ownership of the land where the barracks are located was transferred to the Tartu government. In November 2012, the town government decided to demolish the remaining barracks with a grant from the EIC. Town co-investment was 10% (Tartu Linnavolikogu, 2012). In Tartu's master plan, this area is marked for future reuse as land for public buildings.

Between 2011 and 2013, EIC supported 45 demolition projects of structures "damaging the landscape". The total amount of grant funding supplied was 1,236,015 EUR. Twenty-one applications were submitted by the public sector. Only three of these demolitions took place on the lands of any of the 47 Estonian towns (EIC, 2013).

5.3 Future land use in local governments' preferences

The relative importance of actual new construction on brownfields was also examined. Town representatives counted the number of all permits for new buildings issued by local government from the year 2005 until now, and estimated how many of them concerned brownfields. The estimated data show a wide variation. Eleven out of nineteen towns replied that there were no building developments on their brownfields at all, while four towns estimated the share of new construction on brownfields to be higher than 10%. Two towns indicated an extremely high percentage. In Kiviôli it was 23.7%, and in Sillamäe, the estimate was up to 54.5%. Both are small former mining and industrial towns with a considerable number of brownfields. These estimates, however, will need to be validated by further research.

Permits issued for brownfield land in all nineteen towns represented on average 5.6% of all permits for new buildings. In England, the proportion of new dwellings built on previously developed land is the main figure used for monitoring the success of planning policy. This figure has risen from 57% in 1996 to 77% in 2007 (Baing, 2010). Compared to this, the proportion (5.6%) for Estonia is very low and shows space for future improvement.

To gather information about town governments' preferences towards the future use of the detected brownfields, a list of common land use options was compiled and respondents were asked to mark all suitable options. Although the questionnaire included the option of 'no preference' for the future use of brownfields, most respondents did indicate their preferences.

In terms of desired future uses, retail (13 points), industry (13 points) and residential (10 points) use were the most popular (Fig. 6). The key issue in reuse, however, needs to be flexibility. As Adams, De Sousa and Tiesdell (2010) state: "... local planning authorities may wish to reserve sites for an apparently useful purpose for which current demand is low (for example, manufacturing industry) by preventing their immediate development for another purpose for which current demand is high (for example, housing)". Local governments should try to make their planning regulations concerning brownfield sites as flexible as possible, so as not to stiffen the constraints to brownfield redevelopment.

5.4 Negative effects of brownfields

As Letang and Taylor (2012) argue, citizens and local authorities have different perspectives concerning the perception of brownfields, their negative impact and the success of their redevelopment. While local authorities tend to put more emphasis on economic aspects, citizens rate neighbourhood quality of life higher. The following results therefore need to be addressed with this perspective in mind. Municipal officials were asked how important they considered the negative impact of brownfields to be on local quality of life. One out of twenty respondents stated it had extremely high importance, six considered it highly important, another six marked the option 'medium importance', four 'low importance' and one respondent did not see it as important at all (Table 1). It can be understood then that most municipalities acknowledge the need for action in this domain. For thirteen out of eighteen local governments, brownfields' negative impacts on the quality of life in their town were of at least medium importance.

The size of a town or its population did not significantly affect the perceived importance of brownfields' presence (see Tab. 2), although a correlation (Pearson's r = 0.322) with the relative extent of brownfields in a city (as % of total area) can be seen. However, even this relationship has a lot of exceptions. For example, the town of Rakvere has one of the largest proportions of brownfields (7.0% of total city area), but it is not perceived as a serious problem there. On the contrary, Narva reported its percentage of brownfields to be only 1.4%, while also noting that the negative presence of brownfields has an extremely high importance (Fig. 7 – see cover p. 2).



Fig. 6: Preferred land use by municipalities Source: authors' survey

It is interesting that such differing results were received from respondents. It seems the perceived importance of brownfield sites on town land better expresses the size of the brownfield problem than data relating to the relative extent of brownfield sites in the area. Respondents seem to be more precise in the evaluation of brownfields' negative impacts on a town's life than in the estimation of the real extent of brownfields in their municipalities. A more important correlation though is between the growth or decline of population in the last decade and the perceived importance of negative impacts (Pearson's r = -0.411). An example of this correlation can be seen when comparing towns that present completely opposite perceptions of brownfield importance. The town of Saue reported no negative impacts from brownfields. Saue is situated in close proximity of the capital, and is one of three towns where the population has been increasing during the last decade (+11.2%)between 2000 and 2011 census) as a result of Tallinn's urban sprawl. In contrast, the town official from Narva noted that the negative impact on the quality of life in their town was of extremely high importance. Narva, the most populated town in the East-Viru county, and a large town in the Estonian context with more than 60,000 inhabitants, represents a typical shrinking city (Schetke and Haase, 2008; Rall and Haase, 2011). Due to historical reasons, a former high level of industrialization, the social composition of inhabitants and its current economic decline, Narva is experiencing a massive depopulation trend. Between the years 2000 and 2011, its population declined from 68,680 to 58,663 (- 14.6%).

There are also exceptions to this pattern, however. Contrary to the town of Saue, the town of Maardu, another of three growing towns (+4.7%), marked the effect of brownfields as being highly important. Among the group of towns losing more than 15% of population, Mőisaküla (- 29.2%) and Kiviőli (- 23.9%) perceive the negative impact of brownfield sites as highly important, while Kärdla (- 19.2%) and Viliandi (- 15.2%) seem not to be concerned. To understand this contradiction we must look more into the history of these communities. All three towns acknowledging problems with abandoned sites (Maardu, Mőisaküla and Kiviőli) were important industrial towns of the former Soviet Union. Since its collapse in 1991, which resulted in radical structural changes in the Estonian economy, these towns have struggled to deal with their industrial heritage. Even the growth in population as a result of urban sprawl from Tallinn during the last decade, has not helped Maardu deal with its former industrial sites. Kärdla and Viljandi, on the other hand, have always been important tourist towns. Viljandi is a mediaeval town with a well-developed cultural life (folk festival, theatre, cultural academy) and Kärdla is a seaside resort town. As such, the loss of population does not seem to be connected to the presence of brownfields.

The regional location of towns, represented by distance from the capital of Tallinn, also plays an important role in the perceived importance of brownfields (Pearson's r = 0.484). Among seven towns that rated the negative impact of brownfields as having a high or extremely high importance, four are situated relatively far away from the capital (Valga, Kuresaare, Narva and Mõisaküla). Only one of them, the above-mentioned industrial town of Maardu, is situated in close proximity to Tallinn. An even stronger correlation can be seen between registered unemployment and the perceived negative impact of brownfields (Pearson's r = 0.652). Narva, as a town with the highest unemployment rate in Estonia, perceives the importance of brownfields as extremely high (Fig. 8, see cover p. 2). Among six towns that rated negative impacts as having a high importance, three suffer from unemployment higher than the Estonian average (Valga, Kiviőli and Maardu). Conversely, three towns from four, which perceive the effect of brownfields as either being of low or no importance (Saue, Tallinn and Viljandi), have unemployment rates lower than average.

Towns with an industrial past (Narva, Kiviőli, Maardu, Mőisaküla, Tamsalu, Valga) see the presence of brownfields in their territory as being important. These towns tend to have weaker real estate markets and are struggling with the much stronger negative influence that the presence of brownfield sites pose. Towns with many abandoned industrial or military sites have a hard time attracting private investors, which can in turn cause higher unemployment. Town governments in economically distressed areas also have limited resources to put towards these sites. As a result, these town officials feel a real need for their towns' regeneration. Towns that see the negative impacts of brownfield sites as having a low importance are towns that have historically been attractive for tourists (Viljandi, Rakvere, Kärdla), as well as the capital Tallinn. The latter seems to be able, due to its economic power, to deal with a rather high number of brownfields without any considerable perceived negative impact on its inhabitants' quality of life. The actual socio-economic situation of a town in combination with its historical, industrial or military heritage, are the main factors influencing the perceptions of abandoned or under-used areas in Estonia.

The survey results show that there was consensus on the types of negative impacts that brownfield sites pose on a local community's quality of life. Loss of town attractiveness for investors and citizens was pointed out as the most important one (39 points). Brownfields also tend to generate lower municipal revenues through unpaid taxes (15 points), and cause devaluation of their surroundings (11 points). The loss of town attractiveness for tourists and environmental damage (soil, water and air pollution) were also mentioned (8 points each). Other negative impacts received five points or less (see Tab. 3).

Municipalities are clear about the nature of the main negative impact, which is the loss of attractiveness for citizens and investors. For most of them, the presence of brownfields symbolizes depopulation and declining local economic and social activity, which threatens the town's future. Environmental issues only play a secondary role for them. The town of Valga is a good example of such development. Valga is situated in South-Estonia, on the border between Estonia and Latvia. Valga is a medieval town where the main development occurred at the end of the 19th century; then it became an important railway junction. Before the First World War, its population peaked at 20,000 inhabitants. As a result of the collapse of the Russian Empire, Valga was divided between Estonia and Latvia and lived through economic decline. After the Second World War, during the time of the Soviet occupation, Valga became an important industrial and military centre and its population peaked at 18,500 citizens by the end of the 1980s in the Estonian part of the town. To house the incoming workers and soldiers, large numbers of new pre-fabricated apartment blocks were raised. After the collapse of the Soviet Union, military troops left the town and Valga lost more than 4,000 people in one year. As a result of industry restructuring, Valga's current permanent population is a little higher than 12,000 people (ES, 2013b). Because of a large surplus of apartments after the military withdrew at the beginning of the 1990s, many people moved from the historical, mainly wooden apartment houses with

Rank	Negative impact	Category	Points
1.	Loss of town attractiveness for investors and citizens	Economic	39
2.	Decreasing tax revenue, loss of tax base	Financial	15
3.	Deprivation of brownfields' surrounding	Spatial	11
4.	Loss of town attractiveness for tourists	Economic	8
5.	Environmental damages (soil, water and air pollution)	Environmental	8
6.	Deterioration of market climate	Economic	5
7.	Urban sprawl	Spatial	5
8.	Higher unemployment	Social	5
9.	Rising crime rate	Social	5
10.	Increasing need for social security benefits	Social	1
11.	Reduction of local government's budget (risk of failure in financing actual level of public good)	Financial	0

Tab. 3. Negative impact of brownfields on life in towns as perceived by local governments. Source: authors' survey

poor facilities to relatively new ones made of pre-fabricated panels. Nowadays the town's historical centre, which is under heritage protection, is practically empty. Of eight historical buildings around the main church, only two are occupied: the town hall and a music school. Vacant, unused buildings contribute to a loss in property value. They also have a negative effect on citizens' sense of attachment to the place (Letang and Taylor, 2012) and a trust in the town's future. This results in civil apathy and low citizen involvement in town affairs. Given the above results, it might be safe to say that in Estonia, brownfield perception has less to do with actual environmental contamination and is more a result of the legacy of Soviet heritage and regional development.

5.5 Barriers to redevelopment of brownfields

As to the impediments to redevelopment for potential investors, there was a consensus among municipalities on two responses in terms of both rank and frequency: additional costs associated with the site clean-up and redevelopment (23 points); and low real estate value of the site (20 pts.). Unsuitable site location (15 pts.), investors' fear of risk (13 pts.) and longer project duration (13 pts.), were also often pointed out. Other forms of negative impact received six points or less (Tab. 4).

The main barriers slowing down the process of brownfields revitalization in Estonia, from the municipalities' point of view, were the municipalities' limited financial resources

Rank	Barriers to brownfields redevelopment	Points				
Development barriers						
1.	Additional costs associated with clean-up and redevelopment	23				
2.	Low real estate value	20				
3.	Site location	15				
4.	Fear of risk	13				
5.	Project duration	13				
6.	Responsibility issues	6				
7.	Other	6				
8.	Lack of access to funding	5				
9.	Ownership constraints	2				
Governance issues						
1.	Municipality's limited financial resources	27				
2.	Lack of funding from state or municipal sources	19				
3.	Perception that such development is a private sector issue	19				
4.	Municipality's limited administrative resources	13				
5.	Lack of a proactive brownfields management strategy	8				
6.	Lack of political will	5				
7.	Competing municipal priorities	4				
8.	Lack of government awareness of the problem	3				
9.	Restrictive zoning	2				
10.	Lack of site inventories	1				
11.	Other	1				

Tab. 4: Local governments' perception of main barriers to brownfields redevelopment. Source: authors' survey

(27 points), followed by the lack of funding for potential investors from state or municipal sources and the perception that such development is a private sector issue (both 19 points – see Tab. 4).

Finally, respondents were asked to point out any state program or activity that would help to improve the situation. Typically, various subsidies or grants were mentioned: either direct subsidies for investors to improve the economic viability of projects on brownfield sites (three respondents) or grants for municipalities or site owners for site clean-up (three respondents). Also the need for improved municipal measures to help make site owners take responsibility for their properties was stated twice. One respondent suggested a change in legal regulations to simplify site expropriation and re-privatization; to increase land tax differentiation and generally to improve regional politics.

As for the reason why investors are not in general willing to invest in brownfield sites, local government representatives most often suggested additional costs associated with site clean-up and redevelopment, combined with low real estate value of the site. This reveals the need for measures to decrease the gap between the investments in greenfield and brownfield projects. One of the major barriers to the redevelopment of Estonian urban brownfields is the lack of knowledge about possible state incentives to help the public sector deal with brownfield issues.

The main solution for brownfields redevelopment suggested by municipalities was increasing their financial resources and the implementation of funding for potential investors by state or municipal sources. For both of these measures, municipalities seem to expect special funds from the central government. In addition to these resources, municipalities also expect the government to change legal regulation in order to make site owners more responsible for their property and to increase the possibilities of local governments to impose and control this responsibility.

Central and local governments' perceptions that brownfields development is primarily a private sector issue, also plays an important role. And this is not just the governments' point of view, but seems to be the attitude of the stakeholders involved in land use planning and regulation on the whole – regulators, statutory consultants, service providers, councillors, interest groups, and individuals (Williams and Dair, 2007).

Rates of real estate ownership in Estonia went through significant changes with the end of the Soviet Union. At the beginning of the 1990s, land and real estate that was originally in state ownership was by processes of privatization and restitution transferred to private hands. The significance of those changes can be demonstrated by housing statistics, which show that 95.8% of dwellings in 2012 were privately owned, primarily as a result of this reform. Local governments own 3.2% and the state owns 2% of the dwelling stock. Such figures place Estonia at the forefront of residential property ownership rates within Europe as the share of privately-owned residential properties in Western Europe is around 40-55% (ES, 2012). At the same time, the prevailing liberal-conservative market ideology of the Estonian government has led to a modest regulation of land and real estate use (Roose, Kull, Gauk and Tali, 2013). As a result of these factors, the majority of brownfield sites are owned by the private sector (Fig. 5).

In general, prevailing governmental attitudes on both state and local levels do not facilitate the redevelopment of privately-owned brownfield land. A good example here can be found in section 5.2 above: EIC's different co-financing rules for private and public owners. In spite of the fact that municipalities experience the negative impact of brownfields in their towns, from their point of view it is the owner of each site who is mainly responsible for its redevelopment. And if such redevelopment is not economically viable for the owner, the site stays abandoned. This results in latent conflict between local governments and landowners. Municipalities accuse owners of not using their property and owners accuse municipalities for the economic decline of their town. This conflict needs to be resolved through a better cooperation between the public and private sectors. The public sector needs to play an active role with private sector entities to promote brownfields redevelopment. Currently, the governments on both levels have fairly limited knowledge to be able to do so. The present study aims to contribute to changing that.

5.6 Lack of clear responsibility for the redevelopment of brownfields

Currently there is no government policy to simplify urban brownfield redevelopment in Estonia on a state or local level. The present study shows that, on both levels, officials are aware of the problem and are prepared to deal with it but the ideas on how to start are lacking. During the preparatory work for this study, communication with state institutions revealed the problem of responsibility. In general, there is no governmental institution currently responsible for this issue and prepared to coordinate a possible brownfield policy.

State Government, in its Action programme for 2012-2015 (Eesti Vabariigi Valitsus, 2011) and the Ministry of the Environment in the National Environmental Action plan of Estonia for 2007–2013 (Ministry of the Environment, 2008). shows its willingness to participate in any action in this domain. It is however the Environmental Investment Centre (EIC), falling under the Ministry of Finance, which distributes grants to demolish structures damaging the landscape: this is the only specific measure already used to help brownfields redevelopment. The Ministry of the Interior, which exercises in Estonia the competences of the Ministry of Regional Affairs and is therefore responsible for the coordination of spatial planning, also admitted its responsibility in this regard. At the same time, all state officials stressed it is local governments that are primarily responsible for local spatial development planning. As experience from other countries shows, for the successful redevelopment of brownfields to occur, clear and mature policy at both state and local levels needs to be developed (Adams, De Sousa and Tiesdell, 2010).

6. Conclusions

The present study reveals that, while at the local government level a considerable interest towards brownfields redevelopment is apparent, most Estonian towns are struggling with the challenge. During the study, 695 urban brownfield sites with a total area of 1,152 ha were detected. They constituted on average 2.5% of municipal territories. Correlations between the relative extent of brownfield areas in towns and certain geographical factors (town size, population and spatial peripherality), and socioeconomic factors (relative change in population and registered unemployment) were not shown to be significant. This may be a result of limits presented by the chosen data gathering method. Middle-sized and smaller towns with strong industrial pasts showed a higher proportion of brownfields in their territory. Post-military sites in public possession, representing an important part of all

urban brownfields, are easier to reuse for local governments, although only a modest share of new construction is actually carried out on this previously-developed land.

The perception of the importance of brownfields' negative impacts differs among Estonian towns, with such impacts being perceived as more important in historically industrial towns with a weaker real estate market. Rapidly depopulating towns are the most affected. There is a certain correlation between the importance of brownfields as perceived by local governments and the extent of brownfield area in the town. However, the perceived negative impact of brownfields on a town's life is more influenced by its relative change in population, location and local unemployment. The socio-economic circumstances of a town, in combination with its historical, industrial and/or military heritage, are the main factors influencing the negative perception of abandoned or under-used areas in Estonia. The decline of a town's attractiveness for investors and citizens is most often mentioned as the main negative impact of brownfields on local life. Brownfields symbolize depopulation and decreasing local social and economic activity.

The main barriers inhibiting the redevelopment of Estonian urban brownfields are, in the municipalities' point of view, the lack of assistance from the central government and the widespread opinion that brownfields redevelopment is a private sector issue. There is a strong need for a mature brownfields policy with clearly divided responsibilities at the state level. Measures need to be taken that make investments in brownfields more profitable for investors. Municipalities are also calling for changes in legal regulations that would clarify who is responsible for the property regeneration.

This study has taken some first steps by showing that brownfields do present a problem and are recognized by local governments as an issue that needs attention. The next step could be a detailed study of one Estonian town to create a model process for the inventory and assessment of all brownfield areas. Other important work would be the prioritization of sites by their development potential, the documenting of barriers to development and the creation of model regulations and policies to encourage development. In essence, while municipal officials realize that urban brownfields are a problem that needs to be addressed, the full scope and nature of brownfields redevelopment is not yet understood or measured. If Estonia is to protect its open lands and continue to concentrate development in existing built-up areas, the public sector will need to play an active role with private sector entities to make brownfields revitalization a priority.

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Article 2

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Check for updates

Inadequacies of heritage protection regulations in an era of shrinking communities: a case study of Valga, Estonia

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ABSTRACT

Valga is a small shrinking town in Estonia where the heritage conservation area acts as the business, administrative and cultural centre of the town. Compared to the overall socio-economic situation of the town, the heritage conservation area suffers due to substantially faster depopulation and higher vacancy rates. Revitalization of the urban centre is a key part of the small town's strategy. This paper addresses the question: In an area of urban shrinkage, what role does heritage protection play in revitalization of a town centre? Drawing on a qualitative case study of the Valga heritage conservation area, the findings show that the current heritage protection system does not support revitalization efforts. There is a need to develop a new set of heritage conservation rules for shrinking cities and to adapt the current heritage conservation system to urban shrinkage. The paper further proposes some possible aspects of such system adaptation.

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Introduction

Valga is a small shrinking town in Estonia where the heritage conservation area plays the role of the town centre. Shrinking towns suffer from population loss and economic contraction resulting in high vacancy, property abandonment, overbuilt infrastructure and fiscal distress (Ryberg-Webster, 2016). In Valga, underused and vacant buildings are concentrated in the town centre. Planners underline the importance of revitalization of a town centre in strategies to cope with shrinkage (Leetmaa, Kriszan, Nuga, & Burdack, 2015; Prada-Trigo, 2014; Sánchez-Moral, Méndez, & Prada-Trigo, 2015; Wiechmann & Bontje, 2015; Wiechmann & Pallagst, 2012). The declared goal of the heritage conservation area is the maintenance and preservation of structures that are located within it (Riigikogu, 2002). Thus, the overarching research question for this study is: In an area of urban shrinkage, what role does heritage protection play in revitalizing a town centre? This paper seeks to answer two questions: (1) What barriers does the Estonian heritage conservation system pose in revitalizing a city centre in a shrinking town? (2) How can the Estonian heritage conservation system pose in system adapt to shrinking communities?

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This paper uses Valga, a small European city, as a case study to examine the complexity of heritage protection within shrinking cities. Valga is a strategic case due to its:

- town centre designated as the heritage conservation area;
- decades-long struggle with population loss, property disinvestment and vacancy;
- town reputation as an example of shrinkage within Estonia;
- on-going Comprehensive Planning process that aims to adapt urban space to a shrinking population (first Comprehensive Plan in Estonia with such goal).

Corresponding author of the article has assisted the local government in Valga since 2013 as an urban space specialist. He has been actively involved in various aspects of local planning such as property inventory, comprehensive planning, the Special Conditions for Heritage Conservation survey etc. Field observation, interviews and knowledge of local planning policy gained during the period facilitated a deeper understanding of the town's built environment, historic resources and property conditions.

This paper briefly sets the context of urban shrinkage and heritage protection in Estonia and then gives a deeper overview of the drivers and consequences of urban shrinkage in Valga with a focus on the town centre. A set of applicable lessons and recommendations for adapting heritage conservation system in shrinking communities is then drawn from the example of Valga.

Causes and consequences of urban shrinkage

The phenomenon of shrinking cities has been examined by scholars from different points of views. Researchers investigate urban shrinkage for its economic (Bogataj, McDonnell, & Bogataj, 2016) and social (Großmann, Arndt, Haase, Rink, & Steinführer, 2015; Hollander & Németh, 2011; Ročak, Hospers, & Reverda, 2016) aspects, impacts of shrinking population on land use (Deng & Ma, 2015; Kroll & Haase, 2010), and the challenges of urban governance of shrinking cities (Rhodes & Russo, 2013; Wiechmann, 2008). The concept of urban shrinkage was firstly described among scholars in the USA and Western Europe, and only during recent years post-communist and post-soviet countries of Eastern Europe have started to study the impacts (Leetmaa et al., 2015; Pužulis & Kūle, 2016; Stryjakiewicz & Jaroszewska, 2016). Although research focuses mostly on the problems of larger cities, some articles on shrinking small cities and rural areas have recently occurred (Leetmaa et al., 2015; Pužulis & Kūle, 2016; Wirth, Elis, Müller, & Yamamoto, 2016). Though, there is no singular definition of shrinking cities, the term 'shrinking city' is mainly used for a city which is losing its population and also losing its economic importance (Bernt, 2016; Kotilainen, Eisto, & Vatanen, 2015; Martinez-Fernandez, Audirac, Fol, & Cunningham-Sabot, 2012; Reckien & Martinez-Fernandez, 2011; Sousa & Pinho, 2015; Wiechmann & Bontje, 2015).

Existing research documents the drivers of shrinkage such as economic decline with job losses and out-migration, suburbanisation and natural population decline (Großmann et al., 2015; Haase, Bernt, Großmann, Mykhnenko, & Rink, 2016; Martinez-Fernandez et al., 2012; Reckien & Martinez-Fernandez, 2011). Wiechmann and Pallagst (2012) specify shrinkage in Eastern Europe to be the result of a combination of post-socialist and post-Fordist transformation including deindustrialization, suburbanization, post-

Soviet re-composition and demographics factors. The main factors causing the depopulation of small towns in the Baltic region is the concentration of population and economic activity in the capitals of the states (Pužulis & Kūle, 2016; Tintěra, Ruus, Tohvri, & Kotval, 2014). Urban shrinkage results in falling property values, over-dimensioned and underused infrastructure, social problems, out-migration, and waning social life and public spaces (Sousa & Pinho, 2015). Two of the most prominent symptoms of shrinkage are housing vacancies and urban brownfields (Haase et al., 2016; Wiechmann & Pallagst, 2012).

The overcapacity of houses and the outdated state of maintenance cause the decrease of real estate values (Bernt, Colini, & Förste, 2017; Elzerman & Bontje, 2015). The private sector is not interested in investing in renovating properties or building new apartment buildings. The result is the predominantly low quality of residential premises and the lack of quality apartments. When the quality of life in an apartment building continues deteriorating, those who can do so move out. Apartment owners with the lowest income remain in the building, but they cannot afford to pay for maintenance and the building becomes uninhabitable (Prada-Trigo, 2014).

As Sousa and Pinho (2015) point out, shrinkage has also psychological consequences on citizens represented by hopelessness, lack of motivation and sadness. The greatest capital of any city is its residents. The psychological link between citizens and their place of residence has a significant effect on their activity in their communities. The place attachment of citizens is affected by the residential attractiveness of the area (Miot, 2015; Reckien & Martinez-Fernandez, 2011). Shrinkage leads to housing vacancies and urban brownfields. An urban space with abandoned and underused buildings has a negative effect on the attitude of residents towards their home (Wiechmann & Bontje, 2015). They may lose pride and place loyalty in their city and this in turn leads to a lack of initiative to improve their city (Reckien & Martinez-Fernandez, 2011). This results in a meagre number of small enterprises – cafés, hairdressers, small shops (Miot, 2015). Competing with the passivity of locals, caused by the poor image of shrinking neighbourhood, is essential for the development of the city (Schenkel, 2015).

To strengthen the above described psychological link between the citizens and their place of residence, the quality of public space in the city centre is very important. The chance to walk around in an attractive city centre with guests or business partners, to sit in a café or visit galleries is important for local residents. It increases pride in their hometown and bolsters hope for the future. Despite requiring significant resources, investing in urban space within city centres with a positive agenda is one of the easiest ways to improve the development of a shrinking city (Leetmaa et al., 2015; Sánchez-Moral et al., 2015; Wiechmann & Pallagst, 2012).

For planning professionals, there is a clear need for a paradigm shift from traditional urban planning orientated towards growth to planning for shrinkage (Martinez-Fernandez et al., 2012). Shrinking is a natural part of urban development (Sousa & Pinho, 2015). Residential and job growth is no longer seen as indispensable for urban areas to be economically efficient (Wiechmann & Bontje, 2015). The goal of planning should be a smaller, but nevertheless a viable city (Kotilainen et al., 2015). Those rightsizing strategies require demolitions. Improvement to residential attractiveness can be achieved by physical intervention in urban space through housing demolitions and quality renovation (Camarda, Rotondo, & Selicato, 2015; Hackworth, 2016; Miot, 2015). Professionals see

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demolitions as a way to stabilize the value of properties by the reduction of housing oversupply (Mallach, 2011). For these reasons demolition policy is actually a prevalent discourse among policy makers for the neighbourhoods of shrinking cities mainly in the USA (Hackworth, 2016). However, some researchers oppose this policy (Hackworth, 2016; Rosenman & Walker, 2016). Hackworth (2016) argues that demolition itself, without some other form of intervention, is not able to revive the neighbourhood; that demolition is a signal that the area has been left for dead, which may actually accelerate the process of disinvestment, and that connection between physical deterioration and social disorder can be overestimated. But those arguments do not mean that demolitions do not need to remain as one tool of physical intervention in the urban space of shrinking cities.

Heritage protection and urban shrinkage

Shrinking cities pose particularly interesting challenge to heritage preservation. On one hand the importance of heritage protection in the revitalization of urban space in shrinking cities is largely recognized. Historic buildings, if renovated, help to improve the spatial attractiveness of the neighbourhood (Reckien & Martinez-Fernandez, 2011) and building heritage can play a role in city centre revitalization (Wiechmann & Pallagst, 2012). Historic buildings carry a memory of the place and as such help to strengthen community identity (Ryberg-Webster, 2016). The rehabilitation of the historic centre helps to promote the entire city as a venue for tourists and investors (Sánchez-Moral et al., 2015). On the other hand, preservation policy needs to adapt to the market realities in shrinking cities. Historic preservation is an internal component of a larger system and must align its aims with those of this larger system. Preservation needs to balance the past with the economic needs of contemporary society (Newman & Saginor, 2014). Till now preservation research has been largely disconnected from the dominant urban policy and it has offered minimal guidance for communities where vacancy, abandonment, and property deterioration pose the greatest threat (Ryberg-Webster, 2016).

Mallach (2011) calls for balance between demolition and preservation. In a context of large oversupply of houses in shrinking cities, a building can be preserved only if there is an appropriate use. A lack of market demand discourages the private sector from investing in historic buildings as the cost of restoration exceeds the post-restoration market value of the property. This means that many historical buildings will never find a buyer and remain empty and deteriorating. The aesthetic quality of a building must be weighed against the effect that a vacant building has on its neighbourhood (Mallach, 2011). Vacant buildings have a negative social and economic impact on its surrounding. People are less likely to move into a building close to a deteriorated building or invest in small entrepreneurial activity that could positively influence real estate values (Hackworth, 2016). The core value to be protected is the urban community as a living entity (Mallach, 2011).

Ryberg-Webster and Kinahan (2017) describe the influence of federal historic rehabilitation tax credit on historic preservation in the USA. Historical buildings can apply for tax credit for revitalization if it is listed in the National Register of Historic Place. Such incentives as tax credit for revitalization do have power to help overcome the condition of distress. But historical designation comes with special requirements for the rehabilitation of the building, which mean higher costs for design and construction works which in return work against the goal to restore the building or even to keep it in use. We need to develop strategies for areas where market values preclude costly renovations (Ryberg-Webster, 2016).

Low value of properties in combination with restriction for the conservation of structures under heritage protection often leads to a situation when a lot of properties are disregarded by their owners to the point where the property suffers damage, collapse and need to be torn down. Newman and Saginor (2014) call such process 'Demolition by neglect' and define it as the destruction of a heritage through abandonment or lack of maintenance. Local governments can use different economic incentives, legal penalties, and land use policies to prevent demolition by neglect. Financial incentives are one of the most successful means of counteracting demolition by neglect but underfunding forces to focus on only the most important structures of historic significance. Legal penalties for allowing the process to continue tend to be heavily reactive to structures already succumbing to neglect. Other available tools such as land use policies including incentive zoning, transfer of development rights, design review and interim zoning suit the cities with growing population and remaining development potential (Newman & Saginor, 2014).

There is a dearth of scholarly research focused on preservation in shrinking cities and the existing research focuses mainly on the situation in the USA (Mallach, 2011; Ryberg-Webster, 2016; Ryberg-Webster & Kinahan, 2017). Shrinkage is a universal phenomenon with local specification. The consequences of shrinkage depend on the actual institutional settings and market conditions in a particular location. Bernt et al. (2017) demonstrate how different outcomes of depopulation on housing stock can be in the US and the UK where owner-occupation, high mortgage debt, and liberalized markets are a norm in comparison with Germany where rental sector has a high share within housing market. Scholarly research reacts to such different realities. German contributions often tend to focus largely on vacant housing, the US on poverty, segregation and crime (Bernt, 2016). Similarly to housing sector, the institutional setting of historic preservations in Europe is different from North America. In the US, most historical structures are assessed primarily according to their aesthetic nature and ability to look as they did at a particular time historically. The approach of American preservationists differs from European heritage management by remaining primarily locally regulated, while many European cities practise an area-based approach (Newman & Saginor, 2014). Different institutional settings and market conditions limit the applicability of North American heritage protection tools in Europe. This paper uses Valga as an example to examine the role of heritage protection within the revitalization of shrinking cities in European, and more precisely post-Soviet, context.

Heritage conservation in Estonia

Estonia is among the EU countries whose population is decreasing due to migration and low birth rates. The general speed of population decrease in Estonia is comparable to other Eastern European countries; however, the decline is somewhat slower compared to the other Baltic states. Estonian population is moving to the three biggest cities (Tallinn, Tartu, Pärnu) and from there to their neighbouring municipalities (Figure 1). Communities in other regions are shrinking at a varying pace, depending on their size and



Figure 1. Relative change in population in local government units, 31.03.2000–31.12.2011 (Statistics Estonia, 2015; Graphic courtesy of Statistics Estonia).

location. Smaller communities which are further away from the Estonian capital Tallinn are likely to shrink more quickly than the average (Tintěra et al., 2014).

Heritage conservation in Estonia is regulated by The Heritage Conservation Act. This Act regulates the rights and obligations of state and local government authorities, and the owners of cultural monuments for the preservation of monuments and heritage conservation areas. A cultural monument is structure(s) 'under state protection which is of historical, archaeological, ethnographic, urban developmental, architectural, artistic or scientific value' (Riigikogu, 2002). Heritage conservation areas are defined as historical settlements 'of cultural value which have developed under the joint influence of natural phenomena and human activities'. A heritage conservation area may include 'immovable monuments, which together with the site, natural features, the street network, blocks of houses and arrangement of plots, constitute a culturally valuable whole' (Riigikogu, 2002). The state supervision over monuments and heritage conservation areas is exercised by the National Heritage Board.

Building classification as cultural monuments or building location within the conservation area restricts building conservation and restoration. Monuments or structures located within heritage conservation areas may only be conserved, restored or constructed on the basis of a conservation, restoration and construction plan which adheres to the special conditions for heritage conservation. Both, plan and special conditions need to be developed by a licenced specialist. A licenced specialist has to exercise conservation supervision over the constructional work and in the case of a monument provide the constructional work (Riigikogu, 2002). It means that restrictions for structures located within heritage conservation areas differ from restrictions for monuments only by not having licence requirements for building companies. The National Heritage Board issues conservation activity licences. The National Heritage Board is also the institution which approves permits for conservation, restoration or construction within Heritage conservation areas issued by a local government. The decisions of the Heritage Board supersede the decisions of a local government.

The Heritage Conservation Act gives the owner of a monument or structure located on heritage conservation area the right to apply for support from the state budget to maintain, conserve or restore the building (Riigikogu, 2002). In practice, only investments in monuments are supported and total yearly amount of such incentives allocated from the state budget is really limited. 641,197 euros were distributed between 73 monuments with the average subvention under 9,000 euros in 2017 (the National Heritage Board, 2017a). There are more than 6,000 monuments in Estonia. It is unlikely for an owner to get incentives for their monument and even if they succeed, the allocated support is insufficient. Even the price of compulsory preparative works for the restoration of a monument (special conditions and restoration plan) generally exceeds the average subvention sum. Buildings located on a heritage conservation area are not, due to underfunding, supported at all.

The demolition of a historical building in a heritage conservation area is impermissible if the building can be preserved. The Heritage Conservation Act states directly in its introduction that it *'is prohibited to destroy or damage monuments'* (Riigikogu, 2002) and there are no rules on how to proceed with the demolition of a historical building within a heritage conservation area. In fact, the Act does not include the word 'demolition' at all. Demolition is a subgroup of constructional works and is subjected to the same rules. A building can be demolished only if the special conditions for heritage conservation have not detected it as a valuable building. The only legal way to remove a structure with cultural value within a conservation area is to wait till a structure becomes a ruin. The removal of a wreckage is allowed.

There are 12 heritage conservation areas in Estonia. One of them is rural heritage conservation area and three lie in the Estonian biggest cities (Tallinn, Tartu and Pärnu). The other eight areas are inside towns with less than 18,000 inhabitants. All those towns are losing population with decreases between 10.7% and 15.8% from the census in 2000 to the census in 2011 (Statistics Estonia, 2013). It means that two-third of heritage conservation areas in Estonia are located within small shrinking towns. Valga with its size of population and pace of shrinkage is a typical representative among them.

Case study of Valga, Estonia

Valga is located on Estonian-Latvian border and forms a twin town with Latvian Valka. Valga and Valka descend from the town of Walk which was divided between Estonia and Latvia when both countries got independence from the Russian empire in 1917. Valga is situated 267 kilometres from Tallinn and with its 12,452 residents (Statistics Estonia, 2017b) the town places 12th out of a total of 47 Estonian cites. Valka has 4,718 inhabitants.

Historically, Valga has experienced two periods of rapid growth, while at other times it has lost its population (Figure 2). The connection of the town to the rail network of the Russian Empire in 1889 caused explosive development of industry in the last decade of the nineteenth century and the first decade of the twentieth century. During this first



Figure 2. Valga – Valka population 1881–2040 (authors on the basis of Statistics Estonia, 2017a, 2017b; Tammekann et al., 1932).

period of growth the population increased from 2,473 people in 1867 to 14,179 people in 1919 (Tammekann, Luha, & Kant, 1932). The town was split in two when Estonia and Latvia regained their independence in 1918, and exports to Russia decreased considerably. After World War I the town continued to grow as a result of the increase in its administrative territory and continuing urbanization, but this trend turned during the Great Depression. Then the population decreased from 14,746 in 1929 to 10,842 in 1934 (Tammekann et al., 1932) and continued to decrease until World War II. As a result of the war, Estonia lost its independence and was incorporated into the Soviet Union. The town started to grow again in the 1960s and 1970s. Valga became once again an important industrial town due to the opening of the Soviet market and a military base was established there. Both of these activities had a significant impact on the population growth: from 13,354 people in 1959, to 18,474 in 1979 (Statistics Estonia, 2017a). After Estonia regained its independence in 1991, the Soviet army left Valga and the town's industry collapsed. The town's population decreased by 3,172 people between 1989 and 2000 as a result of these changes, and the population has continued to decline at a similar pace as in other towns in the region. The Population and Housing Censuses issued in 2000 and 2011 Valga showed a 14.4% loss of population (Statistics Estonia, 2013).

Wiechmann and Pallagst (2012) suggest deindustrialization, suburbanization, post-Soviet re-composition and demographics factors as the main drivers of shrinkage in Eastern Europe. The example of Valga confirms their observation. From five major factories operating in Valga at the end of the Soviet era - industrial bakery, textile factory, machinery plant repairing railway wagons, furniture plant and meat factory, only the last two succeeded to adapt to new free-market realities in independent Estonia. Economic decline with job losses caused out-migration, mainly to Tallinn or abroad. During the 90s Valga similarly to the whole state went through the period of low natality which caused natural population decline. Only suburbanization is hard to observe in Valga as there has never been significant real estate development since the collapse of the Soviet Union.

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Valga heritage conservation area

Valga heritage conservation area was declared in 1995 with the objective to preserve the town centre as an urban whole as it had developed historically till the 1940s. The conservation area covers the town centre with an area of 22.7ha and 137 plots. Kesk (Central) street, which is the Valga business, administrative and cultural centre of the town, is located within the conservation area (Figure 3).

There are 119 buildings in the centre of Valga within the Heritage Conservation Area (Figure 4). The oldest buildings date from the second half of the eighteenth century and most of the structures were built-up after the town connection to the railway network in 1889. Therefore, 24% of the preserved buildings date from the second half of the nine-teenth century and 50% from the twentieth century before the Second World War period. 16% of the existing buildings were built during the Soviet occupation (1944–1991), and then only 6 buildings (5%) were added later (Kooskora, 2016). 48% of edifices are residential buildings, mainly apartment buildings. The city centre of Valga has an important public and commercial function. Stores, cafés, hotels and other commercial buildings account for 22% of the existing buildings within the conservation area are classified as cultural monuments (Kooskora, 2016).

There were 735 inhabitants living within the heritage conservation area according the Population and Housing Census from 2011 while 932 inhabitants were enumerated in year 2000, which contributes to 21.1% population decrease. The number of apartments decreased from 548 in 2000 to 502 in 2011 and their occupancy rate from 82.1% in 2000 to 78.3% in 2011. 96% of all apartments were private-owned in 2011 (Statistics Estonia, 2013). The pace of population shrinkage within the heritage conservation area (21.1%) is substantially faster than the decrease of the town population during the same period (14.4%). Despite the fact that the demolition of a historical building in a heritage



Figure 3. The location of heritage conservation area within Valga – Valka.



Figure 4. Valga heritage conservation area: buildings by the period of erection (authors on the basis of Kooskora, 2016).

conservation area is impermissible, a decrease in the number of apartments was detected during the period. It means that apartment buildings had turned to be uninhabitable and were removed, so they have gone through the process of 'demolition by neglect' as described previously. This demonstrates that heritage preservation in Valga is not able to fulfil its intention. This corresponds with Newman and Saginor (2014) observation from the US that neglect is the most difficult situation to solve for preservation institutions, as they have no authority to protect designated structures from demolition by neglect.

Urban regeneration policy of Valga town government

Valga town authorities have formulated an urban regeneration policy for the shrinking city attempting to adapt it to the needs and expectations of its current 12,500 residents. The regeneration policy of local government includes the development of the new Comprehensive Plan, housing demolitions, investment in restoration of monuments and in urban space in the city centre.

A New Comprehensive Plan for Valga territory is developed taking into account the declining population. It aims to adapt Valga urban space into a compact, high-quality environment, with an emphasis on the revitalization of the city centre, renovation of residential buildings and brownfields redevelopment. The development of the city would be directed towards a denser and more concentrated urban area (Valga town government, 2016). The plan is currently the only Comprehensive Plan in Estonia that aims to adapt urban space to a shrinking population.

The physical size of the town still corresponds to the needs of the population from 30 years ago but the number of citizens has actually decreased by a third. This leads to building underuse and vacancy. One of the first tasks of creating a Comprehensive Plan was to undertake a detailed land use inventory. For each of the 3,038 plots in Valga, their actual use and/or vacancy was visually determined. The type of use was determined for each vacant plot:

- greenfield: previously not developed land designated for development in the Comprehensive Plan;
- underused area: previously developed mostly industrial land from where structures have been removed;
- gap: solitary un-built land in compact residential areas;
- brownfield: land with vacant or underused structures.

The results of the land use inventory (Figure 5) conducted by the town government to get an overview of the extent of vacancy show that 2,226 (80%) from 2,781 usable plots are in use. Since the area of vacant or underused plot is on average bigger than the area of plot in use, only 72% of the usable area within the town territory is currently in use. 45 of the 379 apartment buildings in Valga have been completely abandoned, and 34 are less than halfoccupied. From 206 buildings with commercial purpose, 42 are empty and 22 underused, from 128 industrial buildings 19 and 9 respectively. Similarly, the Land Use Inventory of the plots within the heritage conservation area shows that the majority (127 of 137) of sites are built-up. The remaining ten sites were previously developed but the structures were not preserved. From all 137 sites within the heritage conservation area 88 (64%) sites are in use, others are underused or abandoned. In case of sites within the conservation area with a cultural monument on the site even fewer are in use (14 out of 24, or 58%). Compared to the 80% rate of the sites in use for the entire territory of Valga, both numbers (64% and 58%) are substantially smaller.

The vacant or underused apartment buildings are mostly two-storey wooden buildings, usually without central heating, bathrooms or sewerage. This type of wooden apartment



Figure 5. Land use inventory in Valga.

buildings represents key building type from the first period of growth of Valga town. They can be found in various neighbourhoods but most of them are located in the heritage protection area in the centre of the town and as such their vacancy is more apparent than the vacancy of other types of structures. The occupancy rate of four- and five-storey brick or panel apartment buildings dating from the second period of growth is higher due to better living standard they offer.

A larger share of unused residential premises on the market lowers the value of property. The average price of an apartment sold in 2016 in the town of Valga was less than 150 euros per square metre in contrast with average price for whole Estonia exceeding 1000 euros (Statistics Estonia, 2017c). The apartments in two-storey wooden buildings described above are generally sold at auction by law enforcement officer for a few hundred euros per flat. Low price does not allow owners to sell their properties or use them as collateral for loan agreements. The private sector is not interested in investing in renovating properties or building new apartment buildings. Only one apartment building has been erected since 1991 and residential premises are predominantly of low quality.

Due to the process of apartments privatization after the collapse of the Soviet Union the majority of housing is privately owned. In this fact, the Estonian situation differs from most similar situations in Western Europe (Großmann et al., 2015; Haase et al., 2016) and limits local government's ability to act in case of vacancy. Valga town government is proceeding with housing demolitions in accordance with the living standards that the buildings offer. If the buildings are still partially occupied, Valga town government offers the existing residents either social housing or the opportunity to exchange their apartment for another in a more sustainable building. If a building is empty, the town government prepares a technical expert analysis of the building that declares it unsuitable to inhabit, withdraws the right of use from the building and orders a real estate value evaluation of the building. The value of an apartment without the right of use is zero and if the value of the plot does not exceed the demolition costs of the building, the value of the property becomes negative. The apartment owner is left with two options: they can gift their apartment to the town or participate proportionately in covering the demolition costs. Six apartment buildings have been demolished in Valga during the last three years. Only one of them within the Heritage Conservation area where the possibility of demolishment is strictly limited.

As the majority of the abandoned and underused houses in Valga are privately owned, public sector cannot directly invest in their renovation. However, the town government does own the public space between these buildings. Two large projects are currently underway in central Valga. The first creates a new intimate square on the brownfield area in the city centre between the three oldest streets of Valga. The second is linking Valga and Valka city centres with a pedestrian street between Jaani Church in Valga and Lugaži Church in Valka and creates a new central square of Valka town. The length of the new pedestrian street will be 650 m. The town government hope that if environment in the city centre becomes more attractive, the value of buildings in the city centre will increase.

A town centre full of abandoned and underused buildings affects the attitude of residents towards their home town; they may lose pride in their town and this in turn leads to a lack of initiative to improve its situation (Sousa & Pinho, 2015). As part of the Comprehensive Plan, a survey for the Special Conditions for Heritage Conservation was conducted by Valga town government in 2016 to investigate the attitudes of inhabitants of Valga town centre. The questionnaire included 43 questions where responders were asked to specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. A space for comments was provided for each answer. The printed questionnaires were distributed to all 502 residential post boxes within the Valga heritage protection area. The participation rate of the survey was low (38 respondents, 7.6% response rate). Since completed questionnaires were returned mostly by older people, an additional 8 students of the Valga secondary school living in the town centre were later asked to fill the questionnaires to get the opinion of a different age group. This cohort increased the response to 46 completed questionnaires.

Despite low participation rate to the survey, which may be explained partly due to citizen's lethargic attitude caused by disinvestment (Sousa & Pinho, 2015), some general observation can be drawn from the survey. Most of the respondents live in an apartment constructed during the Soviet period (52%), own their apartment (74%) and they are longterm residents of the town centre (average time of residence is 21 years). The preservation of historic buildings in the centre is important for 66% of them and historical environment for 58% of them. Half of the respondents plan to stay within the town centre in the future and the main motive for moving away for the second half of the respondents would be economical or professional reasons. 43% of all the respondents feel forced to leave due to the presence of derelict buildings and 37% due to the presence of inhabitants with social problems within the neighbourhood. The respondents (87% of them) are interested in the future of the town centre. They (73% of them) are in favour of new house construction on the vacant plots and more than half of them (56%) believe that historical buildings could be replaced by modern ones. An equal amount of the respondents (37%) generally wish and do not wish to renovate their homes. Those who wish to do so feel limited more by their economic situation than by the restrictions of Heritage Conservation. The respondents (80%) prefer to preserve the fabric of Valga's town centre, and most of them (72%) believe that developments should be faster.

The results of the survey confirm the theoretical finding of the research on urban shrinkage. The spatial attractiveness of the town centre (Miot, 2015; Reckien & Martinez-Fernandez, 2011) is important for its residents. An urban space with abandoned and underused buildings has a negative effect on the attitude of residents towards their home (Wiechmann & Bontje, 2015). For the residents the town centre is more important as a venue for commercial activities and tourism (Sánchez-Moral et al., 2015) than just as a heritage preservation area. The inhabitants of the centre of shrinking towns are in favour of investment in urban space (Wiechmann & Pallagst, 2012).

Challenges to revitalization of Valga town centre

Higher population decrease between Population and Housing Census in 2000 and 2011 within the Heritage Conservation Area in comparison with population decrease in the whole town is in correlation with the lower use of buildings in the centre. The lower use of buildings under heritage protection compared to not protected ones can be explained at least by two independent aspects.

Firstly, one of the reasons for a building to be listed in the state register of cultural monuments is its historical value. Similarly, to constitute a Heritage Conservation area

the presence of monuments and other structures with historical value within the area is important. This means that structures under heritage protection or within a Conservation Area are typically older than average structures in the town. Population shrinkage leads to disinvestment and in this context the age of a building negatively influences the quality of life and amenities inside the buildings. The quality of life is one of the important factors in deciding whether the building is in use or abandoned (Prada-Trigo, 2014). From this aspect, buildings in the town centre would presumably be vacant more frequently even if not protected because of their age and chronic disinvestment caused by shrinkage.

Secondly, one of the main reasons for vacancy is a market gap between the costs of restoration and the post-restoration market value of the property, which discourage the private sector to invest in historic buildings (Mallach, 2011). Preservation increases this gap even more as licenced works and special requirements for the rehabilitation of protected buildings raise the costs of design and construction works. From this aspect, preservation can be seen as an extra barrier impeding the reuse of a historic building.

As demonstrated previously, data from Population and Housing Census in 2000 and 2011 shows shrinking population within the heritage conservation area have decrease in both, the number of apartments and their occupancy rate during the period. As more detailed data available for the entire town territory demonstrates population shrinkage both before the year 2000 and after 2011, and there is no evidence that the development of the town centre should not copy the pattern the entire town, we can presume that the buildings vacancy in town centre has been rising since the declaration of the heritage conservation area in 1995.

The process can be demonstrated through the residential building at Kesk Street 20. This typical wooden apartment house in the heart of the town (Figure 6) had been losing inhabitants for a long time and insufficient maintenance degraded the quality of life in the building. The town government evicted the last residents in 2015 when the conditions in the building had become uninhabitable. As a result of the process of privatization from the 90s, each of the ten apartments had a different owner or multiple owners, and the majority of apartments were encumbered with debts and mortgages. The town government could not acquire the flats as such. The roof of the building at Kesk 20 was leaking and the condition of the building was deteriorating rapidly. The town government made all the preparations required for demolition as described previously and requested a permit from the National Heritage Board. After lengthy discussions the National Heritage Board refused to issue the permit for demolition in 2017. They argued that the building, despite its major reconstruction during the Soviet era, represents a valuable example of this type of residential structures in Valga and due to the location in the heart of the town it plays an important role in the urban pattern of the conservation area. From the technical point of view they found the building to be possible to preserve. The decision did not address neither the strategy how to force owners to invest in the reconstruction nor guidance for the local government how to eliminate the danger building represents to its surrounding (National Heritage Board, 2017b). The building remained standing at first, but the students' parents from the music school next to the building started raising their voices in early September 2017 due to the unsafe structure. The police sent a memo asking for the building at Kesk 20 to be demolished, as they had repeatedly been called out to the building. Unfortunately, it is very difficult for local governments to justify the use of public funds for the renovation of a privately owned building,



Figure 6. Kesk 20 apartment building before demolition.

especially for a building without use. The town government had two options: wait for the building to collapse or demolish it. On 22 September 2017 the town government implemented immediate substitutive enforcement without a precept for the demolition of a dangerous building and on the same day the structure was demolished.

Kesk 20 is not a singular case but represents the pattern how the Heritage Board has behaved in similar cases in Valga. As an example there was a local government application from 2017 to remove the derelict and dangerous apartment building on address Vabaduse 17a which resulted in an identically argued decision (National Heritage Board, 2017c). Property owners have mentioned identical experiences with their application to remove vacant structures within the conservation area during informal interviews. This corresponds with Newman and Saginor (2014) observation that preservationists in the US often overestimate the value of historical integrity and architectural significance over function.

Demolishing a building at the heart of a heritage conservation area is an extreme measure, which shows the difficult choices faced by the town government and the National Heritage Board in the centre of Valga. Existing heritage conservation system prohibits the National Heritage Board to permit the demolition of a structure with cultural value and does not offer sufficient tools to save it. The barriers of preservation here are not only limited financial resources of the National Heritage Board. Even if it were possible to allocate the support from the state budget, the owner of the building must apply for it. If there are multiple owners, who have already lost interest in their property, as in the case of Kesk 20, no one is prepared to apply. The town government, on the other hand, has many other functions and heritage conservation is only one of them. Safety, the attractiveness of urban

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space, citizens' expectations, and rules for the use of public resources force local government to act, even if this means a conflict with the National Heritage Board.

Need for adaptation of the Estonian heritage conservation system to shrinking communities

If we are to plan the future of shrinking cities, we need to accept the phenomenon of shrinkage and to adapt city development to the effects of population decline (Elzerman & Bontje, 2015; Kotilainen et al., 2015; Wiechmann & Bontje, 2015). In the context of Valga, this means understanding that the population will never again reach the level of 30 years ago. Accepting shrinkage is the sticking point for many communities with a similar fate. In the case of Valga the town government has accepted the inevitable and stabilization efforts are being made. At the level of the National Heritage Board the situation seems to be different. The fact that the responsible authorities - the town government and the National Heritage Board - cannot actually control the decrease in population within the Valga's heritage conservation area, is not apparently understood by the Board. The Heritage Board keeps trying to preserve all valuable structures within the Valga heritage conservation area, imposes regulations on building renovation, restoration and construction, and prevents demolitions. The same set of rules which works in growing cities is failing to preserve heritage in the shrinking town of Valga. Yet the Heritage Board is not allowed to behave differently - as a State institution, the Board needs to follow the Heritage Conservation Act and other laws. The situation of Valga's town centre highlights the bottlenecks in the current heritage conservation system as a whole. We need to develop a new set of heritage conservation rules for shrinking cities and adapt the actual heritage conservation system to urban shrinkage.

Realistic objective of preservation

The statutes of the heritage conservation area of central Valga state that the objective of conservation is to preserve the town centre as an urban whole historically developed till the 1940s. As town centre had formed by the period of urban expansion after the town connected to the railway network, the objective of preserving the town's structure as it was at that time seems too ambitious. We need to accept the population declines, the inadequate maintenance of infrastructure and a reduced need for housing within the town. There is a need to understand the most valuable features of Valga's heritage conservation area and to focus conservation resources on those features.

Acceptance of other town centre functions

The town centre plays an important role as a venue for commercial activities, tourism and residents (Sánchez-Moral et al., 2015). Even if the town centre is declared as a heritage conservation area, one cannot solely concentrate on historic preservation as the main function of the centre. Heritage preservation needs to be weighed against other values of the area. This is difficult when the institutional authority of the National Heritage Board is over the local government authority. The National Heritage Board must understand the wider consequences of its decisions.

The statutes of the Valga heritage conservation area declare the need to preserve the liveability of the historical town centre to the maximum and for as long as possible, but no deeper meaning has been given to this statement. This is in accordance with Mallach (2011) findings that the core value to be protected is the urban community as a living entity. A town centre filled with vacant and derelict buildings worsens the citizens' attitude towards the town and hinders future developments. In this case assessing the value of each building located in a heritage conservation area separately is not justified, and we must also consider the impact of the buildings on the entire area.

A wider assessment of the value of buildings

In the case of possible demolition of a structure only the historical and architectural values of the building and its importance in urban space is actually assessed. If such values are detected, the Building Heritage Board is not allowed to issue the demolition permit. The officials of the Board argue that we cannot foresee whether someone might want to save the building in the future. However, this argument seems inadequate in the context of a shrinking town. In addition to historical and architectural value, an assessment of whether the building is in use and what the likelihood is that the building would be reused before it collapses should be undertaken. The latter is significantly influenced by the structural condition and ownership status of the building. Neglect affects not only the individual building that has deteriorated but also the entire neighbourhood (Newman & Saginor, 2014). The aesthetic quality of the building must be weighed against the effect that a vacant building has on its neighbourhood (Mallach, 2011).

The effect of neglect needs to be evaluated case by case as not only a deteriorating structure but also a vacant plot has a negative effect on its surrounding. Likewise, large scale urban blight is a threat to city branding (Hackworth, 2016). Nevertheless, demolitions need to remain as one tool for physical intervention in urban space even within cultural heritage areas.

Preventive maintenance of buildings before they become a safety hazard

It took several years for the apartment building on Kesk Street to become as run down as it did. The decline of the building accelerated considerably when the roof started to leak and the remaining owners were unable to get it fixed. The local government has the right to intervene if a building is a danger to its surroundings, but the gradual destruction of a building is not sufficient for intervention. Preventing destruction is the duty of the National Heritage Board, which it is failing to perform, at least in Valga. In order to save buildings, it must be possible for the National Heritage Board to temporarily fix the roof and apply pressure on the owners, even if the owners are being negligent or are opposed to the idea. There is a need for mechanism for mothballing and other interim stabilization measures of the historical building (Ryberg-Webster & Kinahan, 2017).

Public investment to monuments

In shrinking cities the public sector is the biggest investor. Limited taxpayers' money needs to be preferably used for investments in the city centre. In Valga, there are

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many examples of cases where this has not been done. The biggest investment made in Valga in recent years was the new Valga County Vocational Training Centre financed by the Ministry of Education and Research, which was built on undeveloped municipal land on the outskirts of the city in 2011. The buildings in the town centre previously used by the training centre have mostly remained empty and are falling apart. In the case of Valga State Upper Secondary School, which was completed in 2016, Valga town government managed to get the state to invest in the monuments in the city centre. This was despite the fact that the status of a monument was a factor that made the projects more difficult and was not favoured by the financier. In a situation where public funds are limited, we should prefer investments in the monuments and buildings in heritage protection areas instead of building new buildings on the outskirts of the city. This requires changes in the state subvention rules to prioritize the rehabilitation of monuments.

Reduce of market gap between the costs of restoration and the post-restoration market value

Building vacancy is caused by the market gap between the costs of restoration and the post-restoration market value of the property, which discourage the private sector to invest in historic buildings (Mallach, 2011). This gap can be reduced by increasing post-restoration market value and by decreasing the costs of restoration. Despite requiring a lot of resources, investment in urban space in the city centre is an effective way to improve the residential attractiveness of the area. Together with the demolitions of buildings reducing the oversupply of residential premises, investments in urban space raise the property value of buildings in the area.

If increasing the value of a property depends mostly on local government's activity, building heritage rules play a crucial role in reducing the cost of restoration. The cost of restoration can be reduced by the public sector subsidies or by the mitigation of requirements for preservation works. Subsidies from state budgets allow a high standard of restoration but the funds are limited. In the context of urban shrinkage, we need to prioritize the use of subsidies to revitalize the most valuable cultural monuments.

For other monuments and structures within the heritage conservation area, there is a need to review the requirements for preservation works. Structures under heritage protection may only be reconstructed on the basis of a conservation, restoration and construction plan which adheres to the special conditions for heritage conservation. Both, plan and special conditions have to be developed by a licenced specialist. There is a lack of licenced specialists and their work is costly. The heritage conservation system should assist property owners with the required design work. A good example here can be the new Special Conditions for Heritage Conservation of the Valga heritage conservation area composed within the framework of the Comprehensive Plan. Valga town government is developing the Special Conditions together with the National Heritage Board and they are composed of much more detail than it is typically required for a Comprehensive Plan. The goal is that in the case of structures within the conservation area the Special Conditions of the whole conservation area will replace the special conditions for the restoration of an individual building. As such the property owner would not be obliged to order them and the cost of design works will fall.

The cost of preservation works is influenced also by the requirements of material integrity such as using historical windows or prohibiting low maintenance materials (Ryberg-Webster, 2016). Preservation efforts should focus preferably on first keeping the building in use, and then on material requirements. Inconsistent material or window can be replaced in the future but the future of an empty and unused building is often short.

Conclusions

Historic preservation is an internal component of a larger system and must align its aims with those of this larger system (Newman & Saginor, 2014). Heritage policy needs to stem from specific urban realities of the protected area. The same set of values and rules that work in growing cities is failing to preserve heritage in the context of shrinking places. Heritage preservationists have to accept the phenomenon of urban shrinkage, understand its realities and develop special protection statues for shrinking communities. Heritage conservation alone cannot be seen as a driver of shrinkage or as the complete solution for the urban regeneration of shrinking cities.

This paper, using the case study of Valga, highlights several aspects of the Estonian heritage conservation system that might need to be revisited. A new set of statutes for shrinking communities needs to:

- allow selective demolitions within the heritage conservation area;
- create a mechanism enabling the National Heritage Board to mothball or use other interim stabilization measures for a historic building in case of owner inactivity;
- assist property owners with the required design work;
- allow material and element alteration to keep the historic building in use;
- increase the public sector subsidies for owners to revitalize the most valuable cultural monuments;
- set mandatory preferences for the use of incentives from the state and European funds for the rehabilitation of historic bindings.

There is no simple solution to the conflict between society's need to conserve architectural heritage and to adapt a shrinking town according to the expectations of its current population. We need additional work to build a robust understanding of this conflict. Further quantitative research needs to be undertaken to confirm the correlation between the level of heritage protection and building vacancy. Tools to reduce the market gap between the costs of restoration and the post-restoration market value of historic buildings should be analysed in more detail. Future research should also search for a theoretical understanding of the conservation areas as a complex system of cultural values of individual buildings, their influence on the surroundings and on residents' behaviour.

This paper offers transferable lessons for shrinking towns with the centre under heritage protection and informs preservationists, planners and urban policymakers about the complexities of heritage protection within shrinking cities. The preservation of historic buildings can be successful only if the development of the town itself is successful. The key to success for any city is its residents and their quality of life. Heritage preservation cannot be seen as an independent value superseding the needs of the town residents. Especially in the town centre, which has other important functions in addition to building protection. 20 👄 J. TINTĚRA ET AL.

The preservation system should consider the negative influence of derelict buildings and urban brownfields on their surroundings and the citizens' perception of them. The core value to be protected is the quality of life inside the conservation area and the use of the buildings under heritage protection.

Disclosure statement

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Article 3

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Innovative Housing Policy Tools for Local Governments in Shrinking Communities with a large share of privately owned apartments:

A Case Study of Valga, Estonia

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Abstract

Shrinking communities face a myriad number of problems. The physical manifestation of urban shrinkage can best be noted in abandoned or underutilized properties, an oversupply or deteriorating housing stock and inadequate aging infrastructure. These physical manifestations lead to psychological impacts of poor perception of a community, lack of a sense of place, lethargic residents who lack the financial means or motivation to improve their living conditions. Planning for the regeneration and rightsizing of shrinking communities calls for intervention by government sectors. Valga is a small town in Estonia where housing vacancies, low quality of residential premises and the shortage of quality apartments are the result of decades of depopulation. As a result of housing privatisation after the collapse of the Soviet Union, a large majority of the dwellings are privately owned. Housing demolitions and revitalisation are a key part of the small town's strategy to deal with shrinkage. This paper addresses the question: In an area of urban shrinkage, what kind of housing policy can local government create in the conditions of prevailing private ownership of residential premises? Drawing on a qualitative case study of the town of Valga, the findings show that housing policy plays an important role in urban recovery for a shrinking community and the leadership capacity of local government in this process is critical. Ownership constrains in housing policy can be overcome but the lack of municipal finance and human resources together with insufficient legislation and missing cooperation with the private sector impedes the process.

Keywords

ownership constrains, housing redevelopment, demolition, shrinking cities, urban brownfields, post-soviet country

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Introduction

Urban shrinkage is a frequently occurring phenomenon in older regions across the globe. Once prosperous industrial or trade centres are now reeling with a loss of population, outdated infrastructure, an oversupply of inadequate housing and financially strapped municipal governments unable to respond to this downward trend (Ryberg-Webster, 2016). Scholars (Elzerman and Bontje, 2015; Miota, 2015; Prada-Trigo, 2015; Sánchez-Moral et al., 2015; Sousa and Pinho, 2015) stress the need to develop coherent housing rehabilitation policy as one of the basic tools to deal with urban shrinkage. Impact of shrinkage on housing depends on the actual institutional settings and market conditions in a particular location. Wiechmann and Pallagst (2012) describes different local strategies to deal with housing in shrinking communities in Germany with a high rental housing sector and in the USA with prevailing owner-occupation of apartments. Similarly to other type of revitalization urban brownfields, ownership constraints represent one of the main barriers to housing redevelopment (Adams, De Sousa and Tiesdell, 2010). Private ownership of problematic (abandoned, underused or low quality) residential houses weaken the position of municipalities as an active player in the residential market and is often used, often as an excuse, for the absence of housing policy in shrinking communities.

Due to the large-scale privatisation of apartments after the collapse of the Soviet Union, a large majority of apartment buildings in Estonia are owned by the private sector. In Valga, a small town in South Estonia, the sustained decline in population has resulted in a high rate of housing vacancies. Thus, the overarching research question for this study is: In an area of urban shrinkage, what kind of housing policy can local government develop considering the prevailing private ownership of apartments? This paper seeks to answer two main questions: 1) What role can housing policy play in dealing with shrinkage? 2) What are the tools for local government to overcome ownership constrains in housing demolitions and redevelopment?

This paper uses Valga as a case study to examine the complexity of housing policy within shrinking cities where a large majority of homes are privately owned. Firstly, the paper briefly sets the context of urban shrinkage and instruments of housing polices in Estonia and then gives a deeper overview of the drivers and consequences of urban shrinkage on housing in Valga. A set of applicable lessons and recommendations for local governments in dealing with housing in shrinking communities is then drawn from the example of Valga.

Causes and consequences of urban shrinkage

The term "urban shrinkage" generally applies to a city or region that is experiencing a decline in population due to reasons such as demographic composition (aging residents, low birth rates etc.) and lack of jobs or economic prospects (Reckien and Martinez-Fenandez, 2011; Martinez-Fernandez *et al.*, 2012; Kotilainen *et al.*, 2015; Bernt, 2014; Sousa and Pinho, 2015; Wiechmann and Bontje, 2015). Shrinkage in Eastern Europe is more specifically the result of a combination of post-socialist and post-Fordist transformation including deindustrialization, suburbanization, post-Soviet re-composition and demographics factors (Wiechmann and Pallagst 2012). The causes and consequences of urban shrinkage are well documented in scholarly literature. Initial attention to this phenomenon came from scholars in the US and Western Europe who discussed urban shrinkage from different points of view such as economic (Bogataj *et al.*, 2016) and social aspects (Hollander and Németh, 2011; Großmann *et al.*, 2015; Ročak *et al.*, 2016), impacts of depopulation on land use (Kroll and Haase, 2010; Chengbin and Ma, 2015) and the issue of urban governance of shrinking cities (Wiechmann 2008, Rhodes and Russo 2013). In recent years, Eastern European researchers have also discussed the issues at length (Leetmaa *et al.*, 2015; Pužulis and Kūle, 2016; Stryjakiewicz and Jaroszewska, 2016). While most of the research examines the causes and consequences of shrinkage in larger cities, a few authors have shed light on small cities and rural areas (Leetmaa *et al.*, 2015; Pužulis and Kūle, 2016; Wirth *et al.*, 2016).

Housing vacancies and urban brownfields are amongst the most prominent symptoms of shrinkage (Wiechmann and Pallagst 2012; Haase *et al.*, 2016). The overcapacity of houses and the outdated state of maintenance cause a decrease in real estate values (Elzerman and Bontje, 2015; Bernt, *et al.*, 2017). As Mallach (2011) states, housing markets often cease to function in shrinking cities and the unequivocal trajectory of supply and demand for housing points to long-term vacancy. One of the main reasons for vacancy is a market gap between the costs of restoration and the post-restoration market value of the property, which discourage the private sector to invest in housing redevelopment (Mallach, 2011). Similarly, the private sector is not interested in building new apartment buildings. The outcome is a largely low quality of residential premises and the shortage of quality apartments. The quality of basic amenities is one of the important factors in deciding whether the building is in use or abandoned (Prada-Trigo, 2015). When the quality of basic amenities in an apartment building becomes uninhabitable (Prada-Trigo, 2015).

In addition to the lack of modern amenities inside apartment buildings, housing vacancies and abandonment create a negative image of the community. Residents lack any sense of place attachment and become ambivalent to improving their quality of life. The psychological link between citizens and their place of residence has a significant effect on their activity in their communities (Reckien and Martinez-Fernandez, 2011; Miota, 2015; Wiechmann and Bontje, 2016).

The consequences of shrinkage on the residential sector depend on specific institutional settings and market conditions in the community. Bernt, *et al.*, (2017) describe different outcomes of depopulation on housing sector in the US and UK on one hand, and Germany on the other. In the US and UK owner-occupation, high mortgage debt and liberalized markets are a norm. In the context of Germany, the rental sector is predominantly high within the housing market (Großmann *et al.*, 2015). German scholars often tend to focus largely on vacant housing, the US on poverty, segregation and crime (Bernt, 2014). Due to the large-scale privatisation of apartments after the collapse of the Soviet Union, owner occupied housing is prevalent in Estonia similarly to the most of the post-soviet and post-communist countries in Eastern Europe. Current research on housing, within the context of shrinkage, focus dominantly on US or Western Europe countries (Wiechmann and Pallagst, 2012; Großmann *et al.*, 2015), where the legal and economic framework differs from conditions in Eastern Europe. This paper aims to present a set of innovative housing policy tools that can be used by local governments spatially in Eastern Europe.

Housing revitalization as a tool to deal with shrinkage

Shrinking regions need a positive narrative for a future perspective. The aim of urban policy is to create a future perspective for inhabitants (Elzerman and Bontje, 2015). Urban development should be a matter of achieving maximum quality of life for the maximum number of people (Sousa and Pinho, 2015). Housing policy plays an important role in

achieving this goal and is acknowledged among the scholars. Sánchez-Moral et al. (2015) see housing together with social cohesion as the noteworthy elements of recovery from shrinkage. Sousa and Pinho (2015) set housing policy consisting of demolition and reconstruction as one of the five most important approaches to deal with consequences of shrinkage. For Elzerman and Bontje (2015) a suitable policy response to shrinkage consists of the acceptance of shrinkage, developing a long-term vision, engaging the inhabitants in the process and fostering intensive regional collaboration and restructuring the housing market. Miota (2015) sees the reactivation of housing market through massive housing demolition and housing diversification, renovation of public space as a tool for improvement of residential attractiveness.

In a dysfunctional housing market where private investments in residential buildings are absent, the local government needs to play an active role in retrofitting the housing stock. The leadership capacity of local government in dealing with the consequences of shrinkage is crucial (Leetmaa *et al.*, 2015; Sánchez-Moral *et al.*, 2015). The goal of urban policy should be a smaller, but nonetheless viable city (Kotilainen *et al.*, 2015). These rightsizing strategies require demolitions as a way to stabilize the value of properties by the reduction of housing oversupply. If there is no effective market demand and no realistic prospect of reuse, buildings need to be demolished (Mallach, 2011). Hackworth (2016), however, points out that demolition itself, if not accompanied by some other form of intervention, is not able to revive a neighbourhood; that demolition is a signal that the area has been left for dead, which may actually accelerate the process of disinvestment, and that connection between physical deterioration and social disorder can be overestimated. In spite of those arguments demolitions need to remain as one viable tool of physical intervention in the urban space of shrinking cities.

Material and methods

Valga can be used as strategic example to explore the housing policy tools for local governments in shrinking communities due to its long-lasting struggle with population loss leading to property disinvestment and vacancy, current elaboration process of the Comprehensive Plan that aims to adapt urban space to a shrinking population (first Comprehensive Plan in Estonia with such goal) and municipality reputation within Estonia as an example of local government developing innovative housing policy.

To describe the population changes in Valga, statistical data from Statistics Estonia were used. In addition to this, the property inventory of the town territory was completed in 2014. For each of the 3,038 plots in Valga, their actual use and/or vacancy were visually determined. The plots were classified as usable or not usable. A usable plot is a plot which has/had been developed or is designated for development in the Comprehensive Plan. If there was a structure on the plot, the type of building and prevalent constructional materials were specified. The type of use was determined for each vacant plot:

- greenfield: previously not developed land designated for development in the Comprehensive Plan;
- underused area: previously developed mostly industrial land from where structures have been removed;
- gap: solitary un-built land in compact residential areas;
- brownfield: land with vacant or underused structures.

The author of this article has assisted local government since 2013 in elaboration of previously mentioned documents (property inventory, Comprehensive plan,) as an urban space specialist. Field observation, interviews and knowledge of local planning policy gain during the period facilitated a deeper understanding of Valga town's built environment, historic resources and property conditions.

Urban shrinkage and housing policy in Estonia

The speed of population loss in Estonia is comparable to other Eastern countries of the EU but slower than the other Baltic states. Estonian population has been decreasing for decades due to out-migration (mostly to Finland), urbanization and low birth rates. The three biggest cities (Tallinn, Tartu, Pärnu) and their neighbouring municipalities account for a large majority of the population. Communities outside those regions are shrinking at varying degrees, depending on their size and location. Smaller communities, further away from the Estonian capital of Tallinn, are likely to shrink more quickly than the average (Tintera *et al.*, 2014).

During the Soviet occupation most of the apartment buildings in Estonia were owned by the public sector or building cooperatives. Similarly to other Eastern European countries, housing stock went through the process of large scale privatisation after the collapse of the Soviet Union. As a result, 98.2% of all dwelling were privately owned in 2011. 85% of households lived in their own apartment or house and 15% rented it. For comparison 63.8% of the Estonian population lives in apartments (Eglit, 2017). Apartment buildings have been privatized mostly by apartment unit and the owners have been forced to create Co-operative Housing Associations to maintain the building as a whole. Each apartment unit can be separately mortgaged or become a part of an insolvent estate, the owners may live abroad. This situation, where the majority of housing in Estonia is privately owned, is different from that in most Western Europe countries (Großmann et al., 2015; Haase et al., 2016). This phenomenon of private, often absentee, ownership limits local government's ability to act in case of vacancy.

The role of local governments is to ensure living space for those who cannot afford to acquire it themselves. But apart from social housing, municipalities are not legally obligated to assist private owners to maintain residential buildings (Eglit, 2017). The Reconstruction grant of state financing institution KredEx gives some assistance for Co-operative Housing Associations for building reconstruction. The grant may cover up to 40% of the total project cost depending on the level of energy saving achieved with reconstruction. The rest of the investment needed must be financed through a mortgage from the banking sector where the building itself is used as collateral. Due to the low real-estate value of the apartment buildings in shrinking cities, the owners have difficulties with financing the investment.

State assistance for local governments to deal with the housing stock in shrinking cities is fairly limited in Estonia. The Estonian government has shown a certain interest in the issue, however. Several already-functioning actions can be pointed out. From 2013 site owners have had the possibility to apply for a grant from the government agency Environmental Investment Centre (EIC) for the 'demolition of structures damaging the landscape' within their property. Since this measure is applicable only to old industrial, military and agricultural facilities, it can be a tool for the demolition of only a small part of housing stock previously related to those functions. Demolition support from by state financing institution KredEx, for public-owned residential premises, has been enabled only since 2016. In this case the building has to be completely owned by the local government. Since 2017, local governments can

apply for Investment support for housing fund development from KredEx. The grant may cover up to 50% of the total project cost and is designated for municipal rental apartment building construction or reconstruction.

Consequences of shrinkage in Valga

Estonian Valga forms a twin town with Latvian Valka. Both towns descend from the town of Walk which was split between Estonia and Latvia when both states emancipated from the Russian empire in 1918. With its 12,334 residents (2018) the Valga town places 12th out of a total of 47 Estonian cites. Valka has 4,592 citizens and the town is ranked as the 32nd biggest out of 76 Latvian cities. The population in Walk saw a first period of fast population growth in the 19th century due to rapid industrialization, predominantly because of its strategic location along the rail network connecting the city to the Russian Empire. During this period the population increased from 2,473 people in 1867 to 14,179 people in 1919 (Tammekann, et al, 1932). When Estonia and Latvia regained their independence in 1918, the town was divided into two (Estonian Valga and Latvian Valka) and exports to Russia dropped considerably. While the population continued to grow in the years following the end of World War I, this trend turned sharply during the Great Depression. Due to the global economic collapse, the population of Valga decreased from 14,746 in 1929 to 10,842 in 1934 (Tammekann et al., 1932) and depopulation continued until World War II. During the war Estonia was occupied and incorporated into the Soviet Union. Population growth restarted for second time in the 1960s and 1970s when, due to the establishment of military base and opening of the Soviet market, Valga once again became an important industrial and military town. Population increased from 13,354 residents in 1959, to 18,474 in 1979 (Statistics Estonia, 2017a). After Estonian and Latvian independencies in 1991, the Soviet army left and the town's industry collapsed. As a result the town lost 3,172 people between 1989 and 2000 and since then the depopulation has continued at a similar pace as in other towns in the region. The Population and Housing Censuses issued in 2000 and 2011 showed Valga with a 14.4% loss in its population (Statistics Estonia, 2013).

The drivers of urban shrinkage in Valga are similarly to other Eastern European cities, characterized by deindustrialization, post-Soviet re-composition and demographics factors (Wiechmann and Pallagst, 2012). Economic downturn has been accompanied by job losses and out-migration, mainly to Tallinn or abroad.

Although, population has decreased by a third since the beginning of the 80s, the size of urban territory has not changed significantly. Vacancy, property abandonment and overbuilt infrastructure are the outcomes of the decline visible in the urban space. The results (Fig. 1) of the land use inventory conducted by the town government show that 2,226 (80%) from 2,781 usable plots are in use. Considering the area of a vacant or underused plot, which is on average bigger than the area of a plot in use, only 72% of the usable area within the town territory is currently in use. Vacancy rates were also determined for different type of structures. From 1,779 single family or duplex homes in Valga, 124 are empty and 45 underused. In the case of apartment buildings, 45 of the 379 have been completely abandoned, and 34 are less than half-occupied. Vacant or underused apartment buildings are mostly from the first period of Valga's growth. These buildings, typically two-storey wooden buildings, usually without central heating, bathrooms or sewerage, can be found in various neighbourhoods but most of them are located in the centre of the town. Therefore, their vacancy is more perceptible than the vacancy of other types of structures. Four- and five-storey brick or panel apartment buildings from the second period of growth shows a lower

rate of vacancy as they offer better living standard.



Fig.1. Land use inventory in Valga (authors, 2014)

From the 12,261 inhabitants of Valga enumerated during the 2011 Population and Housing Censuses 8,556 (70%) live in apartments and only 1,053 (8,6%) rented their dwelling (Eglit, 2017). While the rate of population living in apartments corresponds to the general rate in Estonia, the share of people renting their dwelling is almost two times smaller than the average. The reason can be found both in affordable purchase of own dwelling in Valga and missing interest of the private sector to invest in quality rental housing. Similarly to other regions in Estonia, private ownership of housing dominates. Only 84 (1.3%) of the 6,663 residential premises in Valga are owned by the public sector (Eglit, 2017).

The surplus of vacant residential premises on the market decrease their real estate value. While the average price of an apartment realized in 2016 in Estonia exceeded 1,000 euros per square metre, then in Valga it was less than 150 euros (Statistics Estonia, 2017b). The apartments in problematic residential buildings dating from first period of growth, described above, are generally offered at auction by a law enforcement officer for a few hundred euros per flat and they often remain unsold. Low real estate prices do not motivate owners to sell their apartments and they cannot use them as collateral for loan agreements either. The private sector is not interested in investing in renovating properties or building new residential buildings. Hence, residential premises are predominantly of low quality and only one apartment building has been erected since 1991.

Housing policy of Valga municipality

The housing policy of Valga's municipal authorities follows a general urban regeneration policy attempting to adapt the town to the needs and expectations of its current 12,500 residents. A new Comprehensive Plan for Valga offers a legal framework for intervention in urban space taking into account the declining population. The aim of the Plan is to adapt Valga's urban space into a compact, high-quality environment, with an emphasis on the

revitalization of the city centre, renovation of residential buildings and brownfields redevelopment. The development of the city would be directed towards a denser and more concentrated urban area (Valga town government, 2016). The plan is currently the only Comprehensive Plan in Estonia which aims to follow the principle of planning for shrinkage (Wiechmann and Bontje, 2016). The housing policy of local government includes housing demolitions, housing revitalization and investment in urban space in the city centre.

Housing demolitions

Valga's government is proceeding with housing demolitions in accordance with the living standards that the buildings offer. When the quality of basic amenities in a residential building drops, those who can afford it move out. The remaining low-income owners cannot afford to pay for maintenance and the building becomes uninhabitable. When this happens, they turn to local government with a request for help. The local administration offers the residents either social housing or an opportunity to exchange their dwelling for another in a more sustainable building. People living in partly occupied apartment buildings are generally happy to accept the exchange. The building remains empty and if there is no realistic prospect of reuse, the municipality starts to prepare the house for its demolition.

Before demolition, the local administration will try to acquire the whole building as this enables them to apply for the demolition support for public-owned residential premises from the state financing institution KredEx. However, unsuccessful acquisition of all the apartment units does not mean that the vacant structure cannot be demolished, but, the demolition costs need to be financed from the municipal budget. Seven residential buildings have been demolished in Valga during the last three years. The sites of the demolished buildings have been converted to low-cost temporary public green areas. Residents would even welcome more rapid demolition works, however, the delay is a result of complicated ownership issues when dealing with the abandoned buildings.

Housing revitalization

However, not all vacant residential buildings can be demolished. Valga town centre is declared, on the national level, as Heritage Conservation Area and the possibility to remove structures within it is strictly limited (Tintera, *et al*, 2018). Moreover, the abandoned buildings outside the town centre have often also significant historic and architectural value and play an important role in the urban landscape. In order to preserve at least some of these buildings, new use must be found for them.

To save some of the valuable vacant residential buildings, Valga's administration is trying to transform them to municipal rental apartment houses. Despite the significant surplus of residential premises in the town, the need for quality rental apartments exists. Both, public institutions (city government, hospital, schools, etc.) and private entrepreneurs have struggled with the lack of specialised workers for a long time. But the predominantly low quality of residential premises and the lack of decent dwellings make attracting specialists to Valga very difficult. The public sector must intervene in the free market, at least temporarily, to improve the situation.

As an example, an apartment building with 16 units is currently being transformed to a municipal rental residential building. This structure lies within the town centre and has significant architectural and historical value and has been declared as a heritage monument. The municipality purchased it in 2017 and applied for the newly instituted investment support

from KredEx. The grant was issued and it covers 50% of the total project cost. The revitalization of the building is scheduled to be completed in 2019. These rental units will be primarily offered to the employees of educational institutions in Valga. The municipality has just started another application to finance the second residential building into a social housing.

Investment in urban space in the city centre

Despite the important role of local administration in housing revitalization, the majority of the residential buildings need to stay in private hands and the public sector cannot directly invest in their renovation. However, the town government owns the public space between these buildings. Two large projects are currently underway in central Valga. The construction of a new town square on the brownfield area in the city centre between the three oldest streets of Valga was in August 2018. The second project is linking Valga and Valka city centres with a pedestrian street between Jaani Church in Valga and Lugaži Church in Valka and creates a new central square of Valka town. The length of the new pedestrian street will be 650m. The town government hopes that despite requiring a lot of resources, investment in urban space in the city centre is an effective way to improve the residential attractiveness of the area and raise the property value of buildings in the area.

Strategy to overcome ownership constrains

Ownership constrains are the first obstacles to overcome before both the demolition and housing revitalization process starts. Within private ownership status two types of residential buildings can be distinguished:

- Buildings privately owned or co-owned as a whole. These are typically single family or duplex homes. But in addition to these, there are also apartment buildings, which were already empty before the privatisation of housing stock in the beginning of the 90s. Due to this they have not been legally divided to apartment units and they have been returned to pre-war owners or sold as a whole;
- Apartment buildings privatized by apartment units.

Buildings privately owned or co-owned as a whole

The negotiation strategy of local administration depends on the type of private ownership of vacant residential building. In the case of owned or co-owned buildings, the local government offers to owner(s) one of the following options: take-over, authorisation agreement or purchase of the property.

Take-over of the property is for free. Many owners of buildings that have been empty for long periods are no longer interested in their property and low or negative real estate value of building does not allow them to revitalize it. Vacant building deteriorates and becomes unsafe for its surroundings. Local government is obliged to ask the owners to eliminate the danger and this requires investment. If owners do not see the reason to invest, government offers them a take-over of the property. An individual house was taken-over in this way and demolished in 2017.

Authorisation agreement is used where owners see a future perspective for their property. The owners are aware of the low actual value of the building, but they believe that the situation will change in the future. In this case, the municipality offers them a bilateral agreement which transfers the building rights of the plot to the government for 15 years. Then the town

administration demolishes the existing buildings covering all relevant costs. During this period, the town maintains the plot and exempts the owner from property tax. At the end of the period, the owner can decide if he or she wants to restart to use the plot or to extend the agreement. The former dormitory for railway workers was acquired this way and it was demolished in 2015.

The purchase of the property is usually used in the case of residential buildings which are a part of an insolvent estate. Current Estonian legislation does not allow the law enforcement officer to give away property for free. Law enforcement officers are obliged to organise an auction of indebted property and there is no success, to repeat it regularly while continuing to reduce the price. When the price becomes acceptable, the government purchases the property. In 2015, the municipality used this method to demolish a former apartment building.

Apartment buildings privatized by apartment units

In the case of buildings split into apartment units, negotiations are generally more complicated. Buildings often have tens of owners, apartments are often mortgaged, indebted and some owners live abroad. In the beginning, the municipality contacts all owners and proposes to take over their apartments. If some of them are not willing to do so or some of apartments are mortgaged or indebted, the town government follows the next steps:

- orders a technical expert analysis of the building that declares it unsuitable to inhabit;
- withdraws the right of use from the building;
- orders a real estate value evaluation of the building.

The value of an apartment without the right to use is zero, and generally the value of the plot does not exceed the demolition costs of the building so the value of the property is negative. Local administration continues to ask the owners to eliminate the danger of the building on its surrounding. Then, when it is not done and the house is still unsafe, it demands the removal of the entire building. As the last step, the municipality announces that if the building is not demolished by a particular date, it will implement immediate substitutive enforcement without a precept of the demolition of a dangerous building. The apartment owner is then left with two options: they can gift their apartment to the town administration or participate proportionately in covering the demolition costs. Then demolition is executed. If the owners do not question the process, the reimbursement of the demolition costs is not implemented. Three apartment buildings have been removed during the last three years following above described procedure (Fig.2).

The revitalization of a residential building requires the acquirement of all its apartment units. As such, the municipality is in a weaker position in this acquisition process. For example, in the case of one building transformation to municipal rental flats some apartments were exchanged for apartments in other houses and some of them were purchases for a market price. Local administration can purchase apartments only when the building has extraordinary architectural or historical value. Otherwise, it would deform the real-estate market in Valga, as the owners will wait for the municipality to acquire their valueless residential premises.



Fig.2. E. Enno 2 apartment building before demolition (authors, 2015)

Barriers of faster housing demolition and revitalization

Although Valga's municipal authorities are able to overcome the ownership constrains in most cases, the speed of the process is not satisfying. During last three years local administration has demolished up to three residential buildings a year. If we presume, that all vacant and half of underused apartment buildings need to be finally demolished, it would take more than 20 years to accomplish the goal at that pace. This does not include the single family and duplex homes.

The main barriers inhibiting the process of demolition are:

- lack of human resources within the town administration. Buildings split into apartment units often have several owners and each of them needs to be contacted repeatedly. These time-consuming negotiations require considerable human resources within the municipality;
- limited subsidies for demolition. Existing subsidies can be issued only to structures completely owned by local government, which limits largely the use of the tool;
- lack of insolvency legislation. Current Estonian legislation does not allow a law enforcement officer to write off mortgage from a property even if the chance to realize the property on the market is non-existent. Such mortgages burden the property for decades and limit the possibility to dispose with them.

Main barriers to faster housing revitalisation are:

- the private sector's limited possibilities to finance or co-finance revitalization. Low real-estate value of the properties does not enable owners to use the property as collateral for loan agreements and investment in housing does not bring profit;
- the current system of heritage protection. The requirements for preservation works raise the cost of revitalisation and limit the adaptation of structures for new functions. Tintera *et al.* (2018) refer to the challenges of heritage protection within shrinking cities.

Conclusions

While the current local government is not responsible for the shrinking population in Valga, it attempts to use urban housing policy to right-size the infrastructure and housing supply to serve better its residents and improve the quality of life for its citizens. Valga's housing policy includes both residential building demolition and revitalization. The prevailing private ownership of vacant and underused residential premises has necessitated local government to employ a multitude of tools and tactics for negotiations with proprietors. Housing demolitions have turned out to be easier to perform than revitalizations due to the lower costs and the ability to demolish a building on safety grounds without actually acquiring all the apartments in a building. Valga's housing policy has overcome most ownership constrains; however, its application is too time consuming.

In order to speed-up housing demolition and/or revitalisation, local administration would need assistance from state institutions. The main barriers for faster movement in this domain is the lack of human resources for negotiations and the fiscal distress of local government. New subsidy tools prove that Estonian state has started to accept its role in the housing sector, however, all the subsidy tools focus on the indirect investments in housing and do not provide financial assistance for local governments in the application of policy. Insolvency legislation needs to be adopted in the absence of real estate value in shrinking communities. If a debt substantially exceeds the value of collateral for mortgage and there is no realistic expectation for the change in market values in the nearest future, there ought to be a possibility to cancel the debt and the dispossession of the property should be allowed. The private sector, in shrinking communities, is waiting for the state guarantees of commercial loans to be able to invest in housing. All this requires the development of specific state housing policy for shrinking regions, which presumes the acceptance of shrinking phenomenon at the state level.

Most of the post-soviet and post-communist countries in Eastern Europe experienced, as a result of collapse of the Soviet Union, similar ownership transformation and the large-scale privatisation of apartment stock and institutional settings as well as residential market conditions similar to those in Estonia. As such, Valga can be used as a strategic example for the local governments in Eastern European shrinking communities. Valga proves that prevailing private ownership of residential structures cannot be used as an excuse for the absence of housing policy in shrinking communities. If government acts actively and adapts strategies on individual case-by-case basis, it is possible to overcome most of the obstacles. Residents generally respond well to the active housing policy of Valga's government and both, demolition and revitalization activities have been positively covered in the local press. As only a small part of the vacant or abandoned housing stock has been removed to date, and the first housing revitalization processes have just begun, it is difficult to fully evaluate the impacts of this proactive housing policy. If real-estate prices increase, urban space is more attractive and the quality of life for Valga residents improves, then Valga's municipality housing policy will be evaluated as successful.

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Article 4

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Stadtumbau in Ostdeutschland und Valga (Estland) – Ähnlichkeiten und Unterschiede

Andreas Hendricks und Jiří Tintěra

Zusammenfassung

Der Beitrag gibt einen Überblick über Ähnlichkeiten und Unterschiede in Ostdeutschland und Estland am Beispiel der Stadt Valga bezüglich Bevölkerungsentwicklung. Problemwahrnehmung auf nationaler und Maßnahmen des Stadtumbaus auf operativer Ebene. Während die Bevölkerungsentwicklung und die grundlegenden Strategien des Stadtumbaus in Ostdeutschland und Valga ähnlich sind, gibt es große Unterschiede bezüglich der Maßnahmen auf nationaler Ebene. Der Unterschied in den Maßnahmen des Stadtumbaus wird beeinflusst durch unterschiedlich hohe Immobilienpreise und eine große Diskrepanz in der Höhe der Unterstützung durch die öffentliche Hand.

Summary

This paper gives an overview of similarities and differences in Eastern Germany and Valga (Estonia) concerning population development, awareness of the shrinking problem on the national level and the

measures of urban redevelopment on the operating level. While the population development and the basic strategies of redevelopment are similar in Eastern Germany and Valga, the measures on the national level are different. The discrepancy of measures of urban redevelopment is influenced by different levels of real estate prices and financial support of the public sector.

Schlüsselwörter: Stadtumbau, Leerstand, Schrumpfung, Stadtentwicklungskonzept, Ostdeutschland, Estland, Valga

1 Motivation und Methodik

Nach dem Zusammenbruch der Sowjetunion haben sowohl Ostdeutschland als auch die baltischen Republiken in den 1990er Jahren radikale strukturelle Veränderungen in Wirtschaft, Politik und Verwaltung durchlaufen. Ein Resultat dieses dramatischen Wandels war ein starker Anstieg von gewerblichen Brachflächen und leer stehenden Wohngebäuden.

Die beiden Autoren trafen sich im Jahr 2017 im Rahmen eines ERASMUS-Austausches, um über Leerstände und daraus resultierende Probleme des Stadtumbaus zu



Abb. 1: Karte von Deutschland und Estland

diskutieren. Dabei stellte sich die Erkenntnis ein, dass die Probleme in ostdeutschen Städten und in Valga auf den ersten Blick überraschend ähnlich sind. Daraus ergab sich der Anreiz für eine vergleichende Analyse, um wechselseitig Impulse für eine Verbesserung der Stadtumbaumaßnahmen zu erarbeiten.

In methodischer Hinsicht handelt es sich um eine vergleichende Fallstudie. Diese Methode bietet den Vorteil, dass relevante Daten detailliert dargestellt werden können, auch wenn andererseits von einem Einzelfall nicht auf die Allgemeinheit geschlossen werden kann (Krusvenik 2016). Der Schwerpunkt des vorliegenden Beitrags liegt im Bereich der Stadtumbaumaßnahmen auf Valga, weil der deutsche Leserkreis die Instrumente im eigenen Land kennen dürfte bzw. entsprechende Informationen leicht verfügbar sind. Die Stadt ist für eine Fallstudie besonders interessant, da auf der einen Seite jahrzehntelange Erfahrungen mit dem Thema Bevölkerungsverlust und Leerstand bestehen und Valga zum anderen die erste estnische Kommune ist, die ein umfassendes Entwicklungskonzept zur Anpassung an diese Situation entwickelt hat. Der Vergleich mit Ostdeutschland ergab sich aus der Überlegung, dass zum einen die Bevölkerungsentwicklung in Ostdeutschland und Valga in den letzten Jahrzehnten sehr ähnlich verlaufen ist und zum anderen

der Stadtumbau in Deutschland sehr wesentlich von den Stadtumbauprogrammen bestimmt wird. Der Einfluss auf dieser Handlungsebene ist so groß, dass sich die Autoren für ein Gebiet mit einer im Vergleich zu Valga erheblich größeren räumlichen Ausdehnung entschieden haben, statt eine einzelne ostdeutsche Stadt auszuwählen. Dadurch wird zudem das angesprochene Problem der Verallgemeinerung einer Einzelfallstudie reduziert.

2 Allgemeine Länderinformationen

Zur besseren Orientierung über die Schrumpfungsproblematik werden in diesem Kapitel einige Informationen über die Bevölkerungsdichte und -entwicklung in den beiden Ländern gegenübergestellt. Beide Länder grenzen an die Ostsee (vgl. Abb. 1). Die Distanz zwischen Berlin und Tallinn beträgt rund 1.000 km.

2.1 Deutschland

In Deutschland sind die Fläche (rund 357.400 km²), die Einwohnerzahl (rund 82,8 Mio.) und die Bevölkerungsdichte (232 Einwohner/km²) erheblich größer als in Estland. Bezogen auf die Länder leben die meisten Einwohner in Nordrhein-Westfalen (17,912 Mio.). In Gegensatz dazu weist das Bundesland Bremen lediglich 0,681 Mio. Einwohner auf (Quelle: Statista, Stand: 31.12.2017). In den neuen Bundesländern besitzt Sachsen die höchste Einwohnerzahl (4,081 Mio.) und die höchste Bevölke-



Abb. 2: Bevölkerungsentwicklung in Deutschland zwischen 1990 und 2015

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Die Bevölkerungsentwicklung nach der Wiedervereinigung verlief sehr unterschiedlich (vgl. Abb. 2). Es gab eine starke Wanderungsbewegung von Ost- nach Westdeutschland. Durch die Binnenwanderung und weitere Faktoren der demografischen Entwicklung verloren einige Regionen in den neuen Bundesländern mehr als 20 % ihrer Einwohner. Die Migration erhöhte zudem den Entwicklungsdruck in den Agglomerationsräumen Westdeutschlands (Hendricks 2013).

Für den Vergleich mit Valga konzentriert sich diese Abhandlung auf Ostdeutschland, weil die dortige Schrumpfungsproblematik mit der in Estland/Valga vergleichbar ist, wie sich im folgenden Abschnitt zeigen wird.

2.2 Estland

Estland besitzt eine Fläche von rund 45.300 km². Die Einwohnerzahl liegt bei 1,319 Mio. (Quelle: Wikipedia; Stand: 31.12.2017) und die Bevölkerungsdichte bei 29 Einwohnern/km². Der größte Bezirk Harju hat 582.556 Einwohner einschließlich der Hauptstadt Tallinn (426.538 Einwohner). Im Gegensatz dazu verfügt der kleinste Bezirk Hiiu lediglich über 9.335 Einwohner. Die zweitgrößte Stadt Tartu hat annähernd 100.000 Einwohner. Alle an-

> deren Gemeinden liegen deutlich unter der deutschen Marke einer Großstadt. Von den 14 Gemeinden mit mehr als 10.000 Einwohnern liegen sechs auch über der 20.000er-Grenze. Insgesamt ist die Bevölkerung ungleich verteilt, wobei eine höhere Dichte im Norden des Landes zu verzeichnen ist. Dies spiegelt sich auch in der Verteilung der größeren Städte wieder. Abgesehen von den Städten Tallinn, Tartu und Pärnu liegen die weiteren drei Städte mit mehr als 20.000 Einwohnern im Bezirk Ost-Viru (Ida-Viru).

> Seit dem Zusammenbruch der Sowjetunion ist die estnische Bevölkerung kontinuierlich geschrumpft (Ministry of Environment 2007). Gemäß dem letzten Zensus von 2011 hatten 1.329.660 Personen einen festen Wohnsitz in Estland. Gegenüber dem vorherigen Zensus aus dem Jahr 2000 ergibt sich ein Rückgang um 71.590 Personen bzw. eine Verringerung um 5,1 %. Die Ergebnisse der Volkszählungen verdeutlichen



Abb. 3: Bevölkerungsentwicklung in Estland zwischen 2000 und 2011

auch die fortschreitende Konzentration der Bevölkerung im Umfeld der größeren Städte. Das gilt insbesondere für Tallinn, Tartu und Pärnu. Aus diesen Wanderungsbewegungen resultiert ein generelles Schrumpfungsproblem in den anderen estnischen Gemeinden. Im Vergleich zum Jahr 2000 trifft der Rückgang insbesondere die kleinen Städte in ländlichen Regionen (vgl. Abb. 3). Mõisaküla, Kallaste und Püssi waren die am stärksten betroffenen Kommunen mit einem Bevölkerungsverlust von 29,2 %, 29,7 % und 42,1 % (Tintěra et al. 2014).

3 Problemwahrnehmung und Maßnahmen auf nationaler Ebene

3.1 Deutschland

Eine der ersten Reaktionen der Bundesregierung auf die städtebaulichen Probleme nach der Wiedervereinigung war die Ergänzung des Baugesetzbuchs (BauGB) durch die Regelungen zu den »Städtebaulichen Verträgen« (§ 11 BauGB). Nach Realisierung der großen Leerstandsproblematik in Ostdeutschland wurde im Jahr 2004 in einer weiteren Überarbeitung dieser Rechtsvorschrift ein kooperatives Verfahren zum Stadtumbau auf der Basis von städtebaulichen Verträgen eingeführt (vgl. §§ 171a-d BauGB). Wichtige Vertragsparteien sind dabei die Gemeinde, die Grundstücks- und Immobilieneigentümer im Stadtumbaugebiet, die Mieter (insbesondere diejenigen, die umziehen sollen), die Kreditgeber (i.d.R. Banken), die Versorgungsunternehmen (die die Infrastruktur an die neue Situation anpassen müssen) und ggf. Immobilieneigentümer außerhalb des Stadtumbaugebiets (z.B. von Wohnungen, in die Betroffene umziehen sollen).

Neben diesen rechtlichen Maßnahmen war die zweite wichtige Reaktion der Bundesregierung der Start des Förderprogramms »Stadtumbau Ost«. Im Februar 2000 hat eine Expertenkommission einen strukturellen Wandel für Ostdeutschland empfohlen. Das Hauptziel war der Rückbau von 300.000 bis 400.000 leer stehenden Wohnungen. Die Details dieses Programms werden im nächsten Kapitel erläutert (Hendricks 2013).

Insgesamt lässt sich somit festhalten, dass in Deutschland auf der nationalen Ebene sowohl im rechtlichen als auch im finanziellen Bereich erhebliche Anstrengungen unternommen wurden, um den Stadtumbau zu unterstützen.

3.2 Estland

Die Schrumpfungsproblematik wird in Estland nur sehr eingeschränkt wahrge-

nommen. Es gibt kein Programm, das mit dem deutschen Förderprogramm »Stadtumbau Ost« vergleichbar wäre. Trotzdem hat die estnische Regierung ein gewisses Interesse an der Thematik gezeigt, woraus einige konkrete Maßnahmen resultieren.

So können bei der nationalen Agentur Environmental Investment Centre (ECI) Fördermittel für den Abriss von Gebäuden beantragt werden, »die die Landschaft verschandeln«. Da sich diese Maßnahme im Wesentlichen auf alte Industrie- und Militäranlagen sowie landwirtschaftliche Einrichtungen außerhalb des urbanen Raums oder in dessen Peripherie bezieht, kann dadurch allerdings nur ein kleiner Teil der Brachflächen revitalisiert werden.

Für leer stehende Mietshäuser gibt es seit 2016 ein Programm zur Rückbauförderung. Diese müssen sich jedoch komplett im öffentlichen Eigentum befinden, wodurch die Anwendbarkeit stark eingeschränkt wird. Schließlich gibt es seit 2017 noch ein Förderprogramm zur Unterstützung der Entwicklung kommunaler Immobilienfonds.

Als Fazit lässt sich festhalten, dass das Thema auf der nationalen Ebene weit weniger präsent ist als in Deutschland.

4 Stadtumbau Ost und Stadtumbau in Valga

Die Bevölkerungsentwicklung in Ostdeutschland und Valga ist in den letzten Jahren bzw. Jahrzehnten ähnlich verlaufen (vgl. Kap. 2). Demgegenüber ist die Problemwahrnehmung auf der nationalen Ebene sehr unterschiedlich (vgl. Kap. 3). Die folgenden Ausführungen stellen die unterschiedlichen Maßnahmen auf der operativen Ebene dar.

4.1 Stadtumbau Ost

4.1.1 Die erste Förderperiode

Die erste Förderperiode erstreckte sich über den Zeitraum von 2002 bis 2009. Das Fördervolumen lag bei 2,5 Mrd. Euro, die gemeinsam von Bund, Ländern und Gemeinden finanziert wurden. Die Hauptziele waren der Rückbau bzw. Abriss von leer stehenden Wohnungen bzw. Gebäuden sowie die Aufwertung erhaltenswerter Stadtteile.

Die Leerstandsquote der Wohnungsbaugesellschaften ging von 16,2 % auf 10 % zurück. Die erste Förderperiode kann daher als Erfolg bezeichnet werden, auch wenn noch weitere Anstrengungen im Bereich des Rückbaus notwendig waren. Bezüglich der Aufwertung erhaltenswerter Stadtteile wurden insbesondere im Bereich der historischen Stadtzentren aus der Gründerzeit große Fortschritte erzielt, wohingegen es weiterhin große Probleme mit den einfacheren Gebieten aus dieser Epoche gibt (Bundestransferstelle Stadtumbau Ost 2010).

Insgesamt wurden von 2002 bis 2010 mehr als 260.000 Wohnungen abgerissen ($\approx 85 \%$ der empfohlenen Menge). Betrachtet man jedoch den chronologischen Ablauf der Abrissaktivitäten, so stellt man fest, dass sich diese verlangsamt haben (vgl. Abb. 4). Der größte Teil des Rückbaus wurde zwischen 2002 und 2006 realisiert. Danach hat sich der Prozess signifikant verlangsamt (abgesehen von Berlin, wo es im Jahr 2009 noch einmal umfangreiche Aktivitäten gab). Ein Grund für diese Entwicklung liegt darin, dass es keine großflächigen Leerstände mehr gab, die sich relativ einfach reduzieren ließen. Die Elimination verteilter Leerstände erfordert demgegenüber erheblich größere Anstrengungen. Weiterhin konzentrierte sich der Abriss zunächst auf unrenovierte Gebäude und der Widerstand der Eigentümer ist verständlicherweise größer, wenn in die Instandsetzung einer Immobilie bereits investiert wurde. Darüber hinaus ist zu berücksichtigen, dass für einkommensschwache Haushalte vor allem der Preis des Wohnraums eine Rolle spielt und somit eine gewisse Nachfrage nach unrenovierten Wohnungen besteht.

Eines der größten Probleme war allerdings die Tatsache, das sich nach den ersten Jahren ein großer Teil der verbliebenen Abrisspotenziale in Privateigentum Einzelner befand und nicht im Eigentum von Wohnungsbaugesellschaften. Generell gestaltet sich der Umbauprozess erheblich einfacher, wenn Wohnungsbaugesellschaften als Vertragspartner fungieren. Diese erleiden durch den Abriss auf der einen Seite zwar einen Verlust an Bausubstanz, haben auf der anderen Seite aber auch gewisse Vorteile, z. B. sinkende Betriebs- und Instandhaltungskosten und Wertsteigerungen der verbleibenden Immobilien durch die Aufwertung des Umfelds und die Reduzierung von Leerständen. Weiterhin können Förderanreize des Programms Stadtumbau Ost dazu beitragen, die Mieter zum Umzug zu bewegen.



Abb. 4: Chronologischer Fortschritt der Abrissaktivitäten in den einzelnen Bundesländern

Die Situation ändert sich entscheidend, wenn eine Einigung mit individuellen Wohnungseigentümern erzielt werden muss. Hier steht dem totalen Verlust des Eigentums der vom Abriss Betroffenen der Wertvorteil derjenigen gegenüber, die ihr Wohneigentum behalten können. In diesem Fall ist die sehr schwierige Frage zu beantworten, wie ein Kosten- bzw. Lastenausgleich erreicht werden kann, der von allen akzeptiert wird (Hendricks 2013).

Ein weiterer wichtiger Punkt, der die Kooperation mit den Wohnungsbaugesellschaften wesentlich erleichtert hat, waren die Regelungen zur Altschuldenhilfe. Die Gesellschaften konnten unter gewissen Voraussetzungen einen Erlass der Altschulden für die abzureißenden Immobilien in Höhe von 77 \in /m² beantragen. Das scheint zunächst kein großer Betrag zu sein, aber die insgesamt in Anspruch genommene Förderung von 1,1 Mrd. Euro zwischen 2001 und 2010 zeigt das große Interesse an diesem Programm.

4.1.2 Die zweite Förderperiode

In der ersten Förderperiode hatte sich der Rückbauprozess gegen Ende verlangsamt. Demzufolge ist der korrespondierende Budgetanteil gesunken (27,6 % in 2009, vgl. Abb. 5). Auf der anderen Seite hat sich dadurch der



Abb. 5: Aufteilung des jährlichen Budgets

Anteil für die Aufwertung erhaltenswerter Stadtteile (59,8 % in 2009) und die Anpassung der Infrastruktur (9,9 % in 2009) erhöht. Diese Entwicklung war entsprechend bei der Planung der zweiten Förderperiode zu berücksichtigen. Nichtsdestotrotz empfahlen Experten weiterhin einen Rückbau von 30.000 Wohnungen pro Jahr insbesondere im Bereich der Mietswohnhäuser.

Aufgrund dieser Fakten wurden die Ziele des Programms modifiziert. Die Hauptziele der zweiten Förderperiode (von 2010 bis 2016) waren die Aufwertung erhaltenswerter Stadtteile, der Abriss bzw. Rückbau von Leerständen, die Instandsetzung einzelner historischer Gebäude (Baujahr vor 1949) und die Anpassung der Infrastruktur. Die ersten beiden Punkte waren zwar schon Ziele in der ersten Periode, jedoch hat sich der Fokus auf die Aufwertung verschoben. Das Budget dieser Förderperiode betrug rund 2,1 Mrd. Euro.

4.1.3 Die aktuelle Situation

Im Jahr 2017 wurden die Programme »Stadtumbau Ost« und »Stadtumbau West« zum Programm »Stadtumbau« zusammengeführt.

Das Programm »Stadtumbau West« startete 2004 und hatte eine eher präventive Orientierung im Vergleich zum Programm in den neuen Bundesländern. Es hatte grundsätzlich eine ähnliche Zielstellung, aber bedingt durch die niedrigeren Leerstandsraten (2011: 3,7 % in Westdeutschland und 8,0 % in Ostdeutschland) war es weniger auf den Rückbau fokussiert und stattdessen war ein wesentlicher Punkt die Revitalisierung von Brachflächen im Rahmen der Innenentwicklung.

Auch das zusammengeführte Programm »Stadtumbau« hat generell eine präventive Orientierung. Wichtige Handlungskriterien sind der demografische Wandel (z. B. regionale und landesweite Wanderungsbewegungen, Immigration und die Geburtenrate), die wirtschaftliche Entwicklung (z. B. Brachflächen), die Entwicklung der Haushaltsgröße und der Wohnfläche pro Person sowie die Leerstandsentwicklung. Die Handlungsfelder konzentrieren sich dabei in der Regel auf die Innenentwicklung. Wichtige Punkte sind die Stabilisierung und Stärkung der Innenstädte, eine Verbesserung der Wohnquartiere (einschließlich der Eliminierung von Leerständen), die Revitalisierung von Brachflächen sowie die Anpassung der Infrastruktur (vgl. BBSR 2016).

4.2 Stadtumbau in Valga

Die Grenzstadt Valga/Valka besteht aus einem lettischen Teil (Valka) und einem estnischen Teil (Valga, vgl. Abb. 6). Die Entfernung von Valga nach Tallinn beträgt 267 km und mit ihren 12.500 Einwohnern stellt die Kommune eine für estnische Verhältnisse mittelgroße Stadt dar (Platz 12 von 47 Städten). Valka verfügt über 4.850 Einwohner und liegt im lettischen Ranking der größten



Abb. 6: Die Zwillingsstadt Valga/Valka

Städte auf Platz 32 von 76. Die Entfernung nach Riga beträgt 159 km.

4.2.1 Bevölkerungsentwicklung

Sowohl Valga als auch Valka haben zwischen den Volkszählungen in den Jahren 2000 bzw. 2011 erheblich an Einwohnern verloren (12 % bzw. 19 %). Das statistische Landesamt Estlands sagt für das Jahr 2040 für Valga einen weiteren Rückgang auf 9.000 Bewohner voraus.

Historisch gesehen haben sich in Valga in den letzten 150 Jahren zwei Perioden raschen Wachstums mit Perioden der Schrumpfung abgewechselt. Die erste Wachstumsphase erstreckte sich über die Jahrhundertwende des 19. zum 20. Jahrhunderts. Während die Einwohnerzahl im Jahr 1881 noch bei 4.200 lag (damals hieß die Stadt noch Walk), vervielfachte sie sich bis 1913 auf 16.000. Dieser rasante Anstieg war das Ergebnis des Anschlusses der Stadt an das Eisenbahnnetz und dem damit verbundenen industriellen Wachstum.

Die zweite Wachstumsphase vollzog sich in den 1960er und 1970er Jahren. Durch die Eingliederung von Estland und Lettland in die Sowjetunion öffnete sich der gesamte sowjetische Markt für die beiden Länder. Zudem verschwand die Grenze zwischen Valga und Valka, die die Zwillingsstadt nach der Unabhängigkeit Estlands und Lettlands im Jahr 1920 geteilt hatte. Dadurch stieg die industrielle und militärische Bedeutung der Gemeinden erheblich und die Einwohnerzahl von Valga bzw. Valka stieg von 13.354 bzw. 4.872 im Jahr 1959 auf 18.474 bzw. 8.023 im Jahr 1979.

Nach der Wiedergewinnung der Unabhängigkeit in den frühen 1990er Jahren wurden die Städte getrennt und die Grenze von 1920 wiederhergestellt. Dieses führte zu einem starken Rückgang der Exporte in den ehemals sowjetischen Herrschaftsbereich. Zudem verlor die Zwillingsstadt durch den Abzug der sowjetischen Truppen zum einen Einwohner und zum anderen einen weiteren wichtigen Wirtschaftsfaktor. Daraus resultierte in Valga ein Rückgang der Bevölkerung um 3.150 Personen zwischen 1989 und 2000.

Seit 2007 gehören Lettland und Estland dem Schengen-Raum an. Dadurch entfallen seitdem die Grenzkontrollen. Die Bevölkerungsentwicklung spiegelt sich stark im Stadtbild wider. Die erste Wachstumsphase wird repräsentiert durch zweistöckige Wohnhäuser aus Holz (vgl. Abb. 7) und die zweite Wachstumsphase durch vier- bis fünfgeschossige Ziegel- oder Plattenbauten (vgl. Abb. 8).



Abb. 7: Historisches Holzhaus aus der ersten Wachstumsphase



Abb. 8: Typisches Wohngebäude aus der Sowjetzeit

4.2.2 Konsequenzen der Bevölkerungsabnahme

Momentan besitzt Valga noch die Ausstattung an Wohngebäuden, Geschäften, öffentlichen Einrichtungen usw., die dem Bedarf von 18.500 Einwohnern entspricht. Seit dem Höchststand hat sich die Einwohnerzahl allerdings um ca. ein Drittel verringert. Von den nutzbaren Grundstücken in Valga (entwickelte Grundstücke bzw. Grundstücke, die im Masterplan der Gemeinde zur Entwicklung vorgesehen sind) befinden sich momentan nur 72 % in einer konkreten Nutzung.

Ein großes Problem stellt vor allem die Belegung der Wohngebäude dar. Von 379 Apartmenthäusern in Valga stehen 45 leer und 34 sind zu weniger als 50 % belegt (vgl. Abb. 9). Vom Leerstand sind insbesondere die Holzhäuser aus der ersten Wachstumsphase betroffen (vgl. Abb. 7), da sie häufig weder über eine Zentralheizung noch ein Badezimmer oder eine äquivalente Sanitärausstattung verfügen. Demgegenüber sind die Plattenbauten aus der Sowjetzeit (vgl. Abb. 8) wegen ihrer besseren technischen Ausstattung erheblich besser belegt. Nach dem Abzug der sowjetischen Truppen sind daher viele ehemalige Bewohner der Holzhäuser in die leer stehenden moderneren Gebäude umgezogen. Dadurch ergibt sich im denkmalgeschützten Stadtzentrum mit seinen vielen Holzhäusern eine besondere Problematik. Von den dort befindlichen denkmalgeschützten Häusern wird momentan nur gut die Hälfte (53 %) genutzt.

Ein weiteres Problem für die Entwicklung der Innenstadt war der bisherige Trend zur Bevorzugung der Außenentwicklung, der unter anderem aus der geringen Bevölkerungsdichte in Estland resultiert. Während der Grundsatz »Innen- vor Außenentwicklung« in Deutschland in den meisten Kommunen mittlerweile umgesetzt wird, wurde in Valga noch im Jahr 2011 durch Entscheidung des Bildungsministeriums eine große Musikschule vom Zentrum in den Außenbereich verlegt. Dadurch wurden nicht nur die bis dahin genutzten Gebäude dem Verfall preisgegeben, sondern auch erhebliche Kaufkraft aus der Innenstadt abgezogen.

Die negative demografische Entwicklung hat auch nachteilige Auswirkungen auf die Wirtschaftskraft und das gesamte Lebensumfeld. Die hohen Leerstandsquoten bei Wohn- und Gewerbeimmobilien sorgen für sinkende Immobilienpreise. Im Jahr 2015 lag der durchschnittliche Kaufpreis für Wohnungen bei weniger als $100 \notin /m^2$. Dieses geringe Preisniveau hält zum einen Investoren von einer Sanierung von Altbauten oder der Neuentwicklung von abbruchreifen Beständen ab, da sich die Kosten nicht amortisieren. Zum anderen sind Immobilien auch als Sicherheit für Darlehen weniger attraktiv.

Von dem schleichenden Verfall sind insbesondere die ärmeren Bevölkerungsschichten betroffen. Wenn sich der Zustand eines Gebäudes verschlechtert und der Leerstandsanteil steigt, ziehen diejenigen aus, die sich den Umzug leisten können. Die Zurückbleibenden müssen dann häufig in eigentlich unbewohnbaren Gebäuden leben.

Letztlich hat die Verschlechterung des Umfelds auch psychologische Konsequenzen. Mit dem Verfall des Stadtzentrums drohen negative Effekte auf die Haltung der Einwohner gegenüber ihrer Heimatstadt. Das Engagement zugunsten einer positiven Stadtentwicklung sinkt und eine Abwärtsspirale wird in Gang gesetzt.

4.2.3 Maßnahmen zur Bekämpfung der Probleme

Die meisten Faktoren für den Bevölkerungsverlust liegen außerhalb von Valga und können auf lokaler Ebene nicht beeinflusst werden. Der erste wichtige Schritt bei der Planung von Valgas Zukunft war daher die Akzeptanz des Schrumpfungsproblems. Daran anschließend wurde in Valga als erster Gemeinde in Estland der Entschluss gefasst, eine Strategie zur Anpassung der Gemeinde an die sinkenden Einwohnerzahlen zu entwickeln. Hierfür war zunächst eine systematische Erfassung

Fachbeitrag



Abb. 9: Landnutzung in Valga

der Grundstücksnutzung notwendig, um einen detaillierten Überblick über das Ausmaß der Leerstandsproblematik zu erhalten (vgl. Abb. 9).

Im Frühjahr 2016 wurde von der Gemeinde der überarbeitete Masterplan 2030+ verabschiedet, der die Anpassung der aktuellen Situation an die Bedürfnisse und Erwartungen der 12.500 Einwohner zum Ziel hatte. Zu den wesentlichen Punkten dieses Plans gehören die Entwicklung einer kompakteren Stadt, die Steigerung der Attraktivität des öffentlichen Raums (insbesondere des Stadtzentrums), die Erhöhung des Grünanteils und die Berücksichtigung der älter werdenden Bevölkerung. Hierfür müssen einige Gebäude abgerissen und einige Grundstücke in Grünanlagen umgewandelt werden.

In den letzten Jahren wurden bereits einige der leer stehenden Gebäude eliminiert, die das Erscheinungsbild ihres Umfelds in besonderem Maße beeinträchtigt haben. Sie wurden durch kostengünstige öffentliche Grünanlagen ersetzt. Sowohl die Gemeinde als auch viele Bewohner würden eine raschere Durchführung der Umbaumaßnahmen begrüßen, aber dem stehen oft schwierige Verhandlungen mit den Eigentümern entgegen. Im Gegensatz zu Westeuropa, wo regelmäßig nur 40 bis 55 % der Wohnungen den jeweiligen Bewohnern gehören, lag der Anteil in Estland im Jahr 2012 bei 95,8 % (Tintěra et al. 2014). Daher sind häufig viele Parteien an den Verhandlungen zu beteiligen. Diese sind zum Teil schwer zu ermitteln oder leben im Ausland. Weitere Probleme sind die Belastung der Immobilien mit Hypotheken oder die Insolvenz der Eigentümer, wodurch das Verfügungsrecht eingeschränkt wird. Alle diese Punkte führen zu zeitraubenden und komplizierten Verhandlungen.

In Abhängigkeit von den gegebenen Umständen bietet die Gemeinde den Eigentümern der zum Abriss vorgesehenen Objekte eine der folgenden Optionen an:

- Der Eigentümer schenkt der Gemeinde das bebaute Grundstück. Viele Eigentümer messen der Immobilie nach längerem Leerstand keinen Wert mehr bei. Das ist auch einer der wenigen positiven Konsequenzen der ohnehin niedrigen Immobilienpreise. Hinzu kommen die Belastung des Eigentümers durch eine Immobiliensteuer und die Kosten für den Erhalt oder die Sicherung der baulichen Anlagen. Daher ergibt sich objektiv betrachtet ein negativer Wert der Immobilie. Auf diesem Wege konnte im Winter 2014 ein verfallenes Geschäftsgebäude in der Innenstadt eliminiert werden.
- Die Stadtverwaltung unterzeichnet eine bilaterale Vereinbarung mit dem Eigentümer. In dieser Vereinbarung gewährt der Eigentümer der Gemeinde die Nutzungsrechte für das Grundstück für einen Zeitraum von 10 bis 15 Jahren. Die Gemeinde übernimmt im Gegenzug den Abriss auf eigene Kosten und wandelt das Grundstück temporär in eine Grünanlage um oder führt es einer sonstigen Zwischennutzung zu. Zudem wird der Eigentümer von der Immobiliensteuer befreit. Am Ende der Vertragslaufzeit kann der Eigentümer

entscheiden, ob er das Grundstück wieder selber nutzen oder die Vertragslaufzeit verlängern möchte. Der Vorteil dieser Regelung liegt darin, dass der Eigentümer die allgemeine Entwicklung der Stadt bzw. eines Stadtteils abwarten kann, ohne sein Eigentum am Grundstück aufzugeben. Dadurch wird die Verhandlungsbereitschaft erhöht, auch wenn eine diffuse Hoffnung auf eine Verbesserung der demografischen Situation besteht. Mittels dieses Werkzeugs konnte im Sommer 2015 ein ehemaliges Wohnheim für Arbeiter der Eisenbahngesellschaft abgerissen werden.

- Wohnungseigentümer, die in untergenutzten Mehrfamilienhäusern leben (d. h. bei teilweisem Leerstand), erhalten das Angebot, ihre Wohnung gegen eine Wohnung mit ähnlichem Wert im städtischen Besitz zu tauschen. Dieses Angebot haben im Jahr 2016 mehr als zehn Wohnungseigentümer angenommen.
- Lebt der Eigentümer nicht in der Wohnung, so bietet die Gemeinde in der Regel keinen Wohnungstausch an. Stattdessen überprüft sie den Zustand des Gebäudes und untersagt ggf. die weitere Wohnuntzung. Zudem wird der Marktwert der Wohnung ermittelt. Ohne Nutzungserlaubnis und unter Anrechnung der Abrisskosten ergibt sich dabei regelmäßig ein negativer Wert. In diesem Fall verbleiben dem Eigentümer zwei Optionen: Er kann der Gemeinde die Wohnung schenken oder er hat den proportionalen Anteil der Abrisskosten zu tragen, wenn er im Miteigentum des freigelegten Grundstücks verbleiben will. Im Jahr 2016 hat die Gemeinde drei Apartmenthäusern die Nutzungserlaubnis entzogen.
- In Einzelfällen kauft die Gemeinde die Immobilie zum sehr niedrigen Marktwert. Dieser Ansatz findet vor allem Anwendung, wenn die Immobilie Teil einer Konkursmasse ist, da insolvente Unternehmen ihr Eigentum nicht verschenken dürfen. Auf diesem Weg wurde beispielsweise im Jahr 2015 ein ehemaliges Apartmentgebäude im Stadtzentrum abgerissen.

Es sollen aber nicht alle leer stehenden Gebäude abgerissen werden. Ein großer Teil des historischen Zentrums steht unter Denkmalschutz. Darüber hinaus gibt es weitere Einzelgebäude von hohem historischen oder architektonischen Wert. Hier wird wenn möglich nach einer sinnvollen Nutzung gesucht, um den Verfall zu vermeiden. Auf eine detaillierte Betrachtung des Konflikts zwischen Stadtumbau und Denkmalschutz muss im Rahmen dieses Artikels wegen des Umfangs der notwendigen Darstellungen leider verzichtet werden.

Neben dem Rückbau ist die Vitalisierung des Stadtzentrums ein zentraler Bestandteil des Stadtumbaus. Dabei eröffnen der kulturelle Sektor und die Aktivierung der Bürger ein großes Potenzial zur Wiederbelebung von Gebäuden. Das gilt sowohl für kurz- als auch langfristige Nutzungen. Aktivitäten, die man auch aus anderen Städten kennt, wie Pop-Up Galerien, Cafés oder Gemeinschaftsgärten, wirken dem Zerfall entgegen und fördern



Abb. 10: Projekt »Zentraler Platz« (Franchi+associati)

ein positives Verhältnis der Bürger zum Zentrum ihrer Stadt. Die Mitnahme der Bürger ist daher ein essenzieller Teil der Stadtentwicklung.

Darüber hinaus wurden zwei große Projekte gestartet, um den öffentlichen Raum im Stadtzentrum neu zu gestalten. Zur Belebung der Altstadt wurde ein städtebaulicher Wettbewerb veranstaltet. Das Ziel war die Schaffung eines neuen Platzes mit einem reichhaltigen Angebot an Ausgehmöglichkeiten (z. B. Cafés und Restaurants, Platz für Märkte und kulturelle Angebote), um den untergenutzten Raum zwischen den ältesten Straßen Valgas (Riia, Raja und Sepa) zu beleben. Der Wettbewerb wurde durch das italienische Architekturbüro Franchi+associati gewonnen (vgl. Abb. 10). Der Ausbau soll in diesem Jahr beendet werden.

Auch für das zweite Projekt gab es zunächst einen städtebaulichen Wettbewerb. Das Ziel war, eine architektonische Verbindung zwischen den beiden Stadtteilen Valga und Valka zu schaffen, die über Jahrzehnte getrennt waren. Der Gewinner des Wettbewerbs, das spanische Büro Safont Tria Architectes, vergegenwärtigt dieses Konzept durch die Schaffung einer Fußgängerzone zwischen der Jaani Kirche in Valga und der Lugazu Kirche in



Abb. 11: Die neue räumliche Achse zwischen Valga und Valka (eigene Darstellung, die Grenze zwischen Estland und Lettland verläuft in diesem Bereich entlang des Baches)

Valka. Die räumliche Achse schafft zudem eine Verbindung zwischen dem neuen Hauptplatz in Valga und dem größten Platz in Valka (vgl. Abb. 11). Das Projekt wird mit 3 Mio. Euro aus dem Estnisch-Lettischen Programm des Europäischen Fonds für regionale Entwicklung gefördert. Die Bauarbeiten haben bereits im Herbst 2018 begonnen (Tintěra 2017).

Weiterhin ist erwähnenswert, dass sowohl der Ausbau des Radfahrnetzes als auch die Erholungsfunktion der Gewässer wichtige Punkte der Stadtentwicklung darstellen.

5 Schlussfolgerungen

Die Bevölkerungsentwicklung und somit auch die Leerstandsproblematik sind in Ostdeutschland und Valga ähnlich (vgl. Kap. 2). Andererseits gibt es auf der nationalen Ebene erhebliche Unterschiede in der Wahrnehmung der Problematik (vgl. Kap. 3). Trotzdem ist die Akzeptanz des Schrumpfungsproblems auf der kommunalen Ebene sowohl ein Problem in vielen deutschen als auch estnischen Gemeinden.

Die Strategien des Stadtumbaus sind grundsätzlich gleichartig. Wichtige Punkte sind der Abriss bzw. der Rückbau von Leerständen, die Aufwertung von erhaltenswerten Stadtteilen bzw. Objekten, die Stärkung der Stadtzentren, die Steigerung der Attraktivität des öffentlichen Raums, eine Erhöhung des Grünanteils und die Berücksichtigung des Alterungsprozesses in der Gesellschaft, vor allem in den Schrumpfungsregionen.

Im Rahmen des Stadtumbaus Ost konnte die Leerstandsquote in Ostdeutschland signifikant gesenkt werden. Dieser Erfolg ist im Wesentlichen auf die Kooperation mit den großen Wohnungsbaugesellschaften zurückzuführen. Mittlerweile stellt sich jedoch sowohl für die deutschen als auch estnischen Planer die schwere Aufgabe, einzelne Privateigentümer zur Kooperation im Stadtumbau zu bewegen.

Die geringen Kaufpreise für Wohnungen in Valga verursachen unterschiedliche Effekte. Auf der einen Seite wirken sie sich negativ auf die Sanierung erhaltenswerter Bausubstanz aus, da sich entsprechende Investitionen wegen der mangelhaften Rentabilität nicht lohnen. Auf der anderen Seite sind die Eigentümer bei einem angestrebten Abriss eher gewillt, ihr Eigentum zu verschenken oder zumindest dem Abriss zuzustimmen. In Deutschland stellt demgegenüber die unrealistische Fiktion hoher Immobilienwerte ein großes Hindernis im Stadtumbau dar. Diesbezüglich ist sicherlich der in Valga verwendete Ansatz der vorübergehenden Übertragung von Nutzungsrechten (vgl. Kap. 4.2.3) eine Option, die in Fällen der Spekulation auf eine zukünftig wieder steigende Nachfrage zur Anwendung kommen könnte.

Der Erfolg des Stadtumbaus Ost im Bereich der Aufwertung erhaltenswerter Stadtteile beruht zum einen auf den erheblichen Finanzmitteln, mit denen das Programm ausgestattet wurde. Zudem ist es für private Investoren in vielen Städten erheblich einfacher, ihre Reinvestitionen in die Sanierung von Altbaubeständen über entsprechende Mieten oder Verkäufe zu amortisieren.

Ein weiterer wichtiger und interessanter Punkt, der in beiden Ländern kontrovers diskutiert wird, ist der Konflikt zwischen Stadtumbau (insbesondere Abriss) und Denkmalschutz. Aufgrund der Komplexität des Themas musste die Fragestellung allerdings hier ausgeklammert werden und wird unter Umständen in einer nachfolgenden Publikation behandelt.

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