INTRODUCTION

Growth and Shrinkage. Shrinkage and Growth. It seems that 2 opposite expressions are located at the other ends of one story. However, the problem of urban transformation is much more complex in the reality and, in few cases, leads to unexpected observations in European cities.

Cities change by the minute we look at them. People come and go, buildings rise up and vanish, entire neighbourhoods transform, the needs of men evolve. Although we consider buildings as 'fixed' things, they can transform a city throughout different usages, different times or by demolition and by this making place for new sorts of development. The construction of a city is never finished, small changes are made every day. Architecture has a space-time sequence. By doing the research on the topic we soon get to know that growth and shrinkage are challenges of all times: medieval towns, post-war towns, shadow cities, urban sprawl... All these different conditions require flexible solutions for a city's layout.

In this research paper the overview of general strategies how to deal with growth and shrinkage is presented. Secondly, we take a closer look to some examples of strategies used by shrinking cities, like it's the case in some cities in Eastern Germany. A critical note can be made by developing strategies in both growth and shrinkage: does man adapt to a city, or does a city adapt to man? This dialogue between a city and its inhabitants is an act of finding the right balance/equilibrium.
LEARNING ACTIVITY: CONCEPTS AND CONTEXTS OF GROWTH AND SHRINKAGE, TASK 1: RESEARCH
KU-Leuven University/St.Lucas-Gent
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GROWTH - CAUSES

To get a real feeling of what is the problem about, it is necessary to look back in the history. To most of the people growth is associated with a strong urbanization process - the population flow from the rural areas to cities. Escalation of those effects have begun since Industrial Revolution, when a huge amount of new work places has appeared. For instance, “Manchester experienced a six-times increase in its population between 1771 and 1831”.

It is needless to say how huge impact it has for a people migration. Recently, we have reached a critical point - when the percentage of people occupying rural and urban areas get equal. Obviously, in more developed countries in Europe the situation where more people inhabit cities exists already for decades (for instance Belgium has reached that level already in 1910). Therefore, this process is perfectly natural, as we can observe it through our own experience.

Why do we face such a strong problem? Undoubtedly more and more people work in services, which nowadays became a key factor of GDP. In highly developed countries it reaches the level of %70. It is hard to deny that proximity is a very important aspect of services. There is a natural tendency to shorten distances, to live together and, therefore, to increase urbanization process.
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GROWTH - IMPACTS

Urban growth has negative and positive effects. One of the positive impacts is a higher economic production which results in more job opportunities and lower unemployment rates. A growing city can offer more qualitative basic services such as transportation, sewer and water services, but also other important services like educational facilities and health care facilities. With better opportunities and better services a better life quality can be reached.

However, this positive impacts of urban growth can be over ruled by the negative impacts. Growth often appears to be uncontrolled and uncoordinated, which results in the phenomenon called urban sprawl. Sprawl increases traffic and traffic infrastructure and destroys open spaces. Urban sprawl brings uncontrolled changes in the physical environment and in the spatial structure of cities.

There are many concepts to respond to growing cities. First of all, one can support the reuse of the existing buildings. This concept is sometimes also called 'smart growth'. Together with the concept of densification it aims to reduce the urban sprawl and its negative effects (pollution, distances, public services...). Different usages of this building can be tested and evaluated during a trial time. This allows involvement of the local community in urban development and ensures that the new usage will be better received. Densification is also possible by adding one level on each building. A second concept of growth is to adapt men's living habits. We can reduce the size of our dwellings and consciously choose for a low-rise high-density architecture. Our space on the earth is a rare resource these days, we should even consider every square meter we make our own. Compact high quality dwellings with green facilities in the neighbourhood and good accessible public services within walking distance will become key in the future city.

Sprawl Growth: http://www.etsav.upc.edu/urbpersp/num01/inf1-01.htm
SCHRINKAGE - CAUSES

We speak of the phenomenon of a shrinking city as a metropolitan area undergoes a significant population loss in a short time period. The last decade there has been a lot of research into this phenomenon of urban decline. A shrinking city refers to abandoned empty houses, empty streets, a lot of waste land and a dying infrastructure. It is a phenomenon that we find back more and more in Europe, especially Central and Eastern Europe have been hit the hardest by urban shrinkage. It was mainly caused by the political changes since 1990, the collapse of the socialist organizations, Eastern Europe suffers from population decline and industrial regression. When we look at Eastern Germany, where we find a lot of shrinking cities since the fall of the Iron Curtain in 1889, after the fall of the Iron curtain the transition from 40 years of socialist rule to a democratic-capitalist economy was not as smooth as expected. A huge population decline in the east of Germany was caused by the reunion of East and West Germany. Due to old factories and mistakes in the new economic policy a sudden deindustrialization caused high unemployment figures and the migration of one million people, even thought there were over a 350.000 empty flats before the fall of the Berlin Wall.

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Basically, we can summarize the causes of urban shrinkage in 3 categories: Political changes (such as happened in Eastern Europe), economic changes such as deindustrialisation or relocation of industry and services, and structural changes such as suburbanization (the outflow of people to the suburbs). On top of this reasons, there are also lower birth rates which causes a population drop, and the increasing life expectancy which causes an aging population. According to the proposal of Bontje there are 3 factors/models that contribute to urban shrinkage: 1) The urban development model: This model suggests that urbanization is a cyclical process and that urban and regional decline will eventually allow for increased growth. 2) The one company town/mono-structure model: When cities focus too much on one branch of economic growth, they make themselves vulnerable to rapid decline. (Detroit, Turin) 3) The shock therapy model: especially in Eastern Europe post-socialism, state-owned companies did not survive privatization, leading to plant closures and massive
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SCHRINKAGE -IMPACTS

Urban shrinkage causes effects like high unemployment rates which is related to the economic decline in the shrinking regions. In Germany, small towns in structurally weak rural regions are suffering the most of urban decline. The underuse of industrial infrastructure brings only a low number of jobs which results in the emigration of the working-age. The demographic change is in this way following a vicious circle and keeps declining. Decline happens episodic and scattered, in this way the collective benefit of concentrated housing gets lost. Houses become islands in a see of green and the urban fabric shows different sizes of vacant areas as a checkerboard pattern.

Since growth on one place may go hand in hand with shrinkage on another place, we must also consider strategies on how to deal with vacant buildings in decreasing cities after a period of growth and speculation. One concept which was already discussed earlier/came across is to support the reuse of the existing (abandoned) heritage (‘smart growth’). We can apply this concept both in the growth and shrinkage paradigm. This measurement may sound easy but a good analysis of the site and of the needs of local community is necessary to make the right decisions and enhance the quality of the city. A second category is the demolition of existing urban fabric. After the demolition different scenarios are possible. One common used idea is green space development. The third and last concept seeks the happy medium between the first two strategies and is called ‘blotting’. This name refers to the words ‘blocks’ and ‘lots’. The aim is to improve the quality of life by taking care of adjacent building lots which would be abandoned and insecure otherwise. Blotting can also be defined as ‘sideyard expansion’.

There are many ways to deal with growth and shrinkage. We have to remember that both situations are strictly related to each other. Undoubtedly, an important cause of both is the transformation in field of industry and/or politics. Increasing economies in one place may cause decreasing economies in another place. As designers we have to find creative ways to handle this dynamic of cities: blotting, demolition, making dynamic places, flexible city lay-out, reconstruction, revaluation, smart growth. Obviously, every situation needs its own design approach according to complexity of factors.

Conclusion
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