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REPERCUSSION: VISIONS ABOUT OUR FUTURE

The thesis is about the possible consequences of our current way of life, and the habitations and their environment that were formed as a result. The thesis is sort of a status report, and its aim is to draw the attention of all people.

Continuing this prodigal, polluting, littering lifestyle we destroy our environment, which leads to the degradation and impoverishment of our habitation and standard of living.

The concept is three possible visions based on studies, scientific treatises and articles. The plan aims to present the evolved situation of life drawn up in the stories through the domicile of people. The location is an existing city, but managed as a fictional site. The events of the three stories are presented through the structural changes of the city. We demonstrate the way of living that evolved due to the events, zooming to a selected area. The three buldings do not have the purpose of representing architectural aesthetics but to show the conclusions for the current visions, these are simply the tools for presenting the situations.



Summary of the current situation

Translation from the dissertation "Fenntartható fejlődés" by László Végh.

"Humans thought the natural resources inexhaustible. When a coal mine or an oil well got exhausted, new tunnels were opened or new wells were sunk. A shortage of anything results directly in development – they thought. England was referred to as an example, where heating by coal was started because of the shortage of firewood which led to the industrial revolution then. The government and the economy took it for a basis that there was no real limit in development. Nobody cared for the view of a power station, smoke or smokestacks because they all certified the victory of human against nature. You could read everywhere about this triumph, about subjugation of the blind forces of nature. You could take it that nothing was more wonderful than humans' overcoming nature.

In the sixties it was written in books, articles our earth could easily provide for even 50 billion humans. Moreover, everybody could earn an income of twenty thousand dollars as that of the citizens of the richest countries of that time. At most exhaustion of the raw materials was feared of. But in this case, as for the mentioned coal example, the human inventiveness was referred, that is how many things were found out, how many discoveries were invented by man. When one of resources was getting exhausted, man found a new one instead. Richer and better ones were found, man replaced the exhausting raw materials with others. Fifty years ago there was hardly anyone in the word who considering any scientific aspects - would have concluded that the human race was threatened by the risk of perdition. About forty years ago, a group of intellectuals of different nationalities recognised and expressed that we went toward a crisis falling on the whole of human race. About thirty years ago publications were published which prognosticated: the universal order could break down in some decades. Approximately twenty years ago it became clear for many people that the pace of economic growth slowed down and pollution and death of the environment could become fatal.



Ten years ago a group of experts surveying the petroleum stock of the world revealed that much more petroleum had been used yearly by that time than how many new resources of it were found every year. By this time, because of the shortage the price of petroleum and natural gas increased significantly and the struggle for the receding resources becomes more and more desperate. At the same time turning attention to the polluted condition of the environment started. Even by the south seas, where there is almost no shipping, rubbish, so-called by-products of the human activities was found on almost every square meter, it was shocking. It became clear that we had to fear not only the decrease of resources. It may be a higher risk that the wastes, by-products of our activities will kill us. The fungus culture in a petri dish perishes not necessarily because of running out of nutriments. Fungi die off before starving because their own metabolates poison them.

Majority of those thinking about the future of the human race is pessimistic. As they think, we are beyond the eleventh hour, the human race meets its fate. As woody allen says: "more than any other time in history, mankind faces a crossroads. One path leads to despair and utter hopelessness. The other, to total extinction."

It's very difficult to realize how grave our position is. No doubt, very many things to be happen so that we can ride out the crisis at least here, in Europe and our subsistence can become sustainable. It seems, out life, the current system of global economy can't be kept in such way as we know today. We must hope that collapse will mean only disappearance of the consumer society but not total destruction of our civilization or even our subsistence. Determinant of our moving into a crisis is the nature of the human way of thinking. Namely, wasting, littering, pollution and the turn of demographic events are not a set of fatal disasters but they are consequences of human delusions and radical intellectual crises."

¹ László Végh, Fenntartható fejlődés (Debreceni Egyetem, Debrecen, 2007-2008/1) page 2-3



The concept

While choosing the topic of the thesis it was important to examine a current global problem affecting everyone, which can be illustrated by architectural tools. The global warming and the effects of our wasteful, invading way of life discussed as the most pressing problems nowadays - seemed an obvious choice. The planning process were preceded by a thorough study of books, articles and treatises related to the topic. The more in-depth sets of information was gathered, the more distressing the situation has seemed - we know that something is wrong, but don't feel the real severity of our situation! As a result of the studies a direction had formulated - a goal - which gave the concept of the thesis. Three visions has formed like thoughts that were not initially definable. Clear scenarios, precise buildings were not formulated, only an obscure impression about changes in the conditions of life.

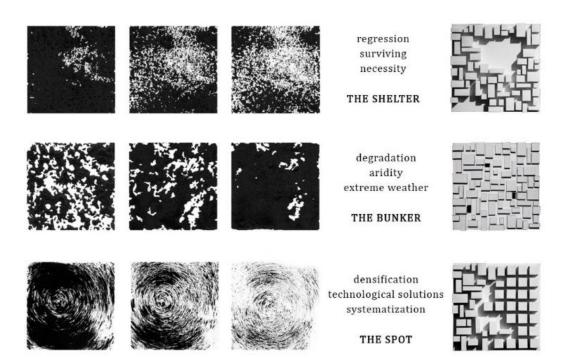


Figure 1 – Impressions based on the visional thoughts (Anna Petrovicz, Zsuzsanna Péter)



According to the impressions it became clear that a building is not enough to illustrate the situation - a larger, complex system is needed to present. The question was how to formulate this topic visually and architecturally. The aim was not to find a solution, to design an eco-house or to inquire into some new technologies - but to create a pictorial, shocking call, which can be interpreted by everyone and it is able to force people to think on the subject and act.

Everyone needs a home, which means security, family, comfort and future. Our house is a vital need, failing that seems inconceivable in life. The future is an idyll in which everyone imagines the life in the most favorable, positive way. The negative notion of losing the warmth of home is a shock to people.

The goal is to transfer the tide of information to architectural language: shaping of future-home visions on the level of the whole settlement - illustrated with structural changes of a city. Through the revealed predictions the three possible lines had been set precisely, each with a repercussion of its own. The result is determined by the particular aspect of life which crosses the utmost line of tolerance. It became obvious, that today's literally taken aesthetics of architecture can not be involved in any of the cases. One way or another but architecture as self-expression and 'beauty' ceases to exist and only the practicality and necessity remain as a task. Buildings will be only the tool of survival and subsistence.













Figure 2 – Transformation of impressions (Anna Petrovicz, Zsuzsanna Péter)



There came a turning point of history. Slowly the previously used methods and roads become impassable to access and they fail. The aim of this project is to raise awareness, to present a particular life circumstance in which the site and the buildings are the presenters. The chosen city is an existing place what gives sense of reality. At the same time it was important to be handled as a fictive site.



Figure 3 – The Site (Anna Petrovicz, Zsuzsanna Péter)



The Shelter

In this vision the causes of changes are fall in economy and the social wealth, crash of its present position. Propensity to consume of the people is increasing from day to day. Humans just live for today without thinking of overconsumption, exhaustion of stocks, exenteration of our planet. This makes us to be slaves of an overdone comfort.

However the point can come when the Earth and its stocks won't be enough for everyone. This situation would result in wars for food required for everyday life on one hand and for acquiring the raw materials at great power level on the other hand. As a result of wars and starvation the population of the world would decrease significantly. Majority of people would leave their place of residence till then in hope of a better life but a part of them would try to stay in the towns and make the conditions required for survival in the actual situation.

Needs of people would be reduced and become much more semi-natural and flexible again. The changed way of life matches to a building simple in all aspects – this is the shelter.

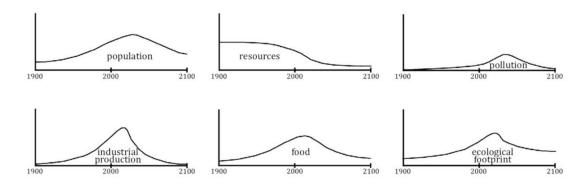
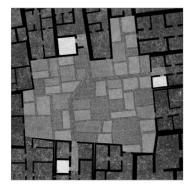


Figure 4 – Changes - The Shelter (Anna Petrovicz, Zsuzsanna Péter)



The shelter is built inside of a block of framed development, enclosing an internal courtyard of the city. As a result of the war bombardments and amortisation the remained parts of building are in a very bad condition. Their existing rooms are covered by crumbled brash making their use impossible. The remaining inhabitants of the area create their modest shelters under these circumstances. They develop their living – and in this case their sleeping – places by cleaning of some old rooms. The dangerous conditions force them to build high above. Closed buildings, maybe with small openings are built for the best defensible character, for the best safety. In order to protect their shelters and themselves the rooms can be approached only from beneath, across a hole formed in the floor, via a ladder. Furnishing is simple, only the pieces of furniture and articles for personal use found in good condition within the area are collected and kept, protected as mementoes of their old lives.

The inhabitants of the area – for their survival and living – product food by own. For protecting their land, they create it in the internal courtyard among the buildings, at a place protected by the ruins. They remove the debris crashed down from the houses so cleaning the plot making it suitable for cultivation. Using the removed building materials they build additional protecting walls around. The paths among the cultivated parcels are paved with brick unusable for building as a negative print of the ruined walls around the courtyard surrounding them as mementoes of the old life.





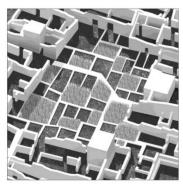


Figure 5 – Layout, Section and 3D siteplan of the Shelter (Anna Petrovicz, Zsuzsanna Péter)



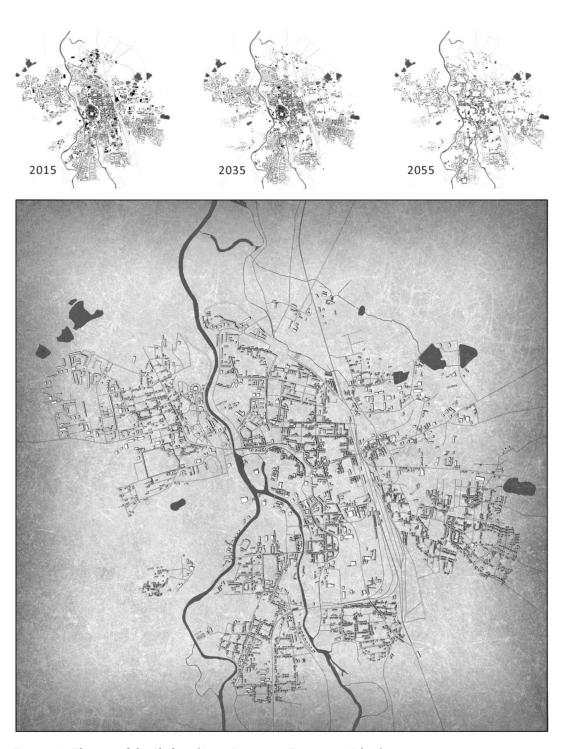


Figure 6 – The site of the Shelter (Anna Petrovicz, Zsuzsanna Péter)



The Bunker

In this vision the extreme natural conditions compel the humanity to organize a survival system. In today's wasteful and polluting lifestyles we have massive negative impact on our planet. Its effects are already perceptible today, but despite the warning signs we do not change it.

Our planet is basically able to regulate its climate, but as a result of human impacts in the last 100 years, the turning point has been approaching, when this could be solved naturally. Research shows that when global warming exceeds this point, it becomes irreversible, triggering a chain reaction that completely changes the temperature and climates on earth, which makes it impossible for humanity to live the present way of life.

As on the surface it was more and more impossible to live, people were pushed underground – for periods getting longer and longer. At the same time that the world above collapsed, the life underground was built up progressively – up became down. Against the extreme weather conditions, humanity is only able to defend itself with the built environment – with a bunker.

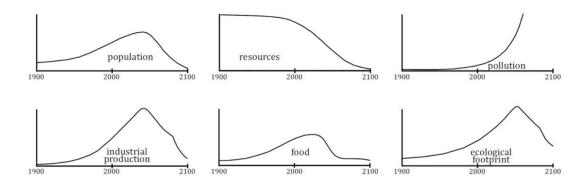


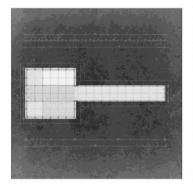
Figure 7 – Changes - The Bunker (Anna Petrovicz, Zsuzsanna Péter)

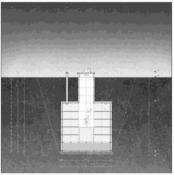


The bunker was built in the suburban area just before the region was fully destroyed by more and more frequent storms and natural disasters. Of course, many people moved on when conditions began to deteriorate, but the weather extremes eventually reached all areas. Besides the luxury-bunkers which could only accommodate a handful of people and were built by the rich, a line of city-operated mass shelters were built up in every possible way, by means of building new, fully equipped concrete bunkers, or simply moving in the existing tunnel systems. All this of course, as long as it was possible.

The bunker is not equipped with any luxuries, it is only able to maintain a minimum standard of living that is necessary for survival. With the termination of the continuous power service, fresh air and light can be delivered into the small room with a hand-driven ventilator, that is also suitable for producing electricity. The beds built into its system of shelves can accomodate two people. In addition, at all available places food and personal belongings are stored - under the floorboards, on the shelf under the bed.

These bunkers are protected against the conditions, but they are not suitable for living after a while. People used to go up to the surface from time to replenish their stocks, and to fix their earlier lives above ground. But as the time went by the moments spent outside almost equals to zero. The residents hope for a brighter future, where they can live again on the surface – as they are waiting for the great storm to pass already.





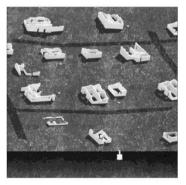


Figure 8 – Layout, Section and 3D siteplan of the Shelter (Anna Petrovicz, Zsuzsanna Péter)



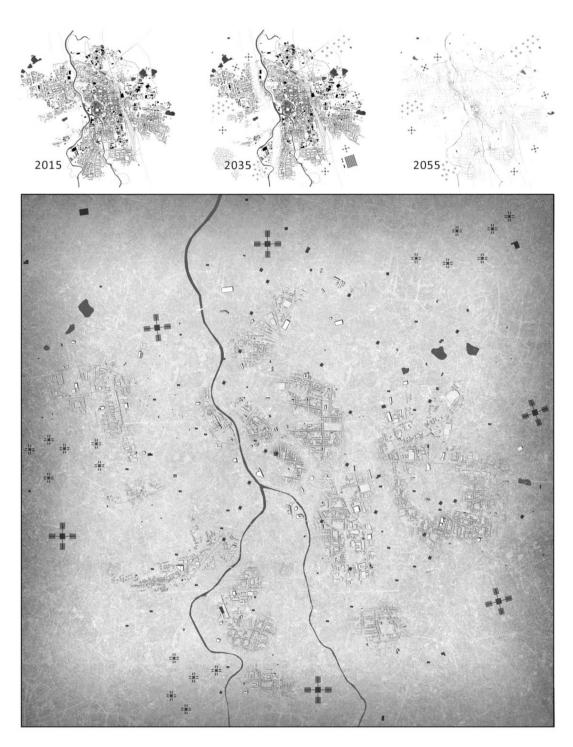


Figure 9 – The site of the Bunker (Anna Petrovicz, Zsuzsanna Péter)



The Spot

In this vision humanity dodged all the pitfalls, evaded the laws of nature. All this is thanks to the technology. Vanquishing all the obstacles that stood in the way of the development of humanity was just one of the tasks to be done, which was easy to solve with the help of the simulations of virtual reality.

Though the root causes of global warming - pollution, disruption of the course of nature - remained the same but with the allocation of different compounds into the atmosphere, the process could be seemingly stopped. The extremely drained freshwater resources could not reproduce, could not renew, but instead people can artificially produce potable water from sea water. Besides the evisceration of the soil, the production of artificial, genetically engineered food has been started in order to serve the needs of the population.

Forasmuch the only thing that has not changed since is the continuous growth of the population. In the more and more crowded cities the living space per capita is decreasing day by day.

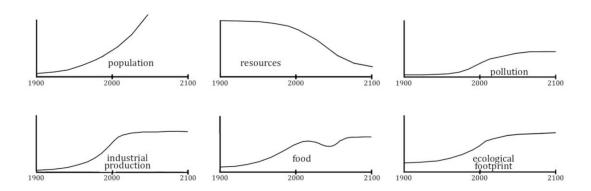


Figure 10 - Changes - The Spot (Anna Petrovicz, Zsuzsanna Péter)



The spot means a place in the world - the small piece that's left for the people to live in. While mankind had been expanding and occupying the last pristine areas in the world, the people as individuals had less and less space. For the needs of the continously growing population all appropriate areas had to be used - even the inept ones. The manual labor, the self-supplying food production and the villages all ceased to exist. Everything is controlled mechanically, all forms of production. People - not getting any other possibilties for living - moved to the cities over the course of decades - thus not wasting more suitable places for food production.

Cities were becoming denser, and with it the people's living space was continously declining. But the modern way of life doesn't take up much space after all. The whole world is available from a single room - just log on to the virtual reality and the whole world expands for you. This residence is just a fully equipped room - a box, a capsule. This residential unit is a product of practicality, all necessary equipment can be put and moved below, on top of and next to each other - that a person in no way occupies more space than necessary in this world. Stepping out from virtuality there is not much chance to find a natural, non-built environment. In the cities, the only green spot is the proximity of the purification centers. The air and the water is cleaned here, life flows back from here to the residential units and one can only breathe in the immediate vicinity of the purification centers without a mask. There is left no more as reminder of the old days - just a spot.



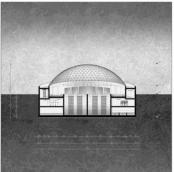




Figure 11 – Layout, Section and 3D siteplan of the Spot (Anna Petrovicz, Zsuzsanna Péter)





Figure 12 – The site of the Spot (Anna Petrovicz, Zsuzsanna Péter)







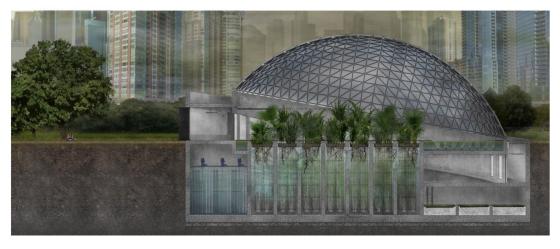


Figure 13 – The Shelter, the Bunker and the Spot (Anna Petrovicz, Zsuzsanna Péter)