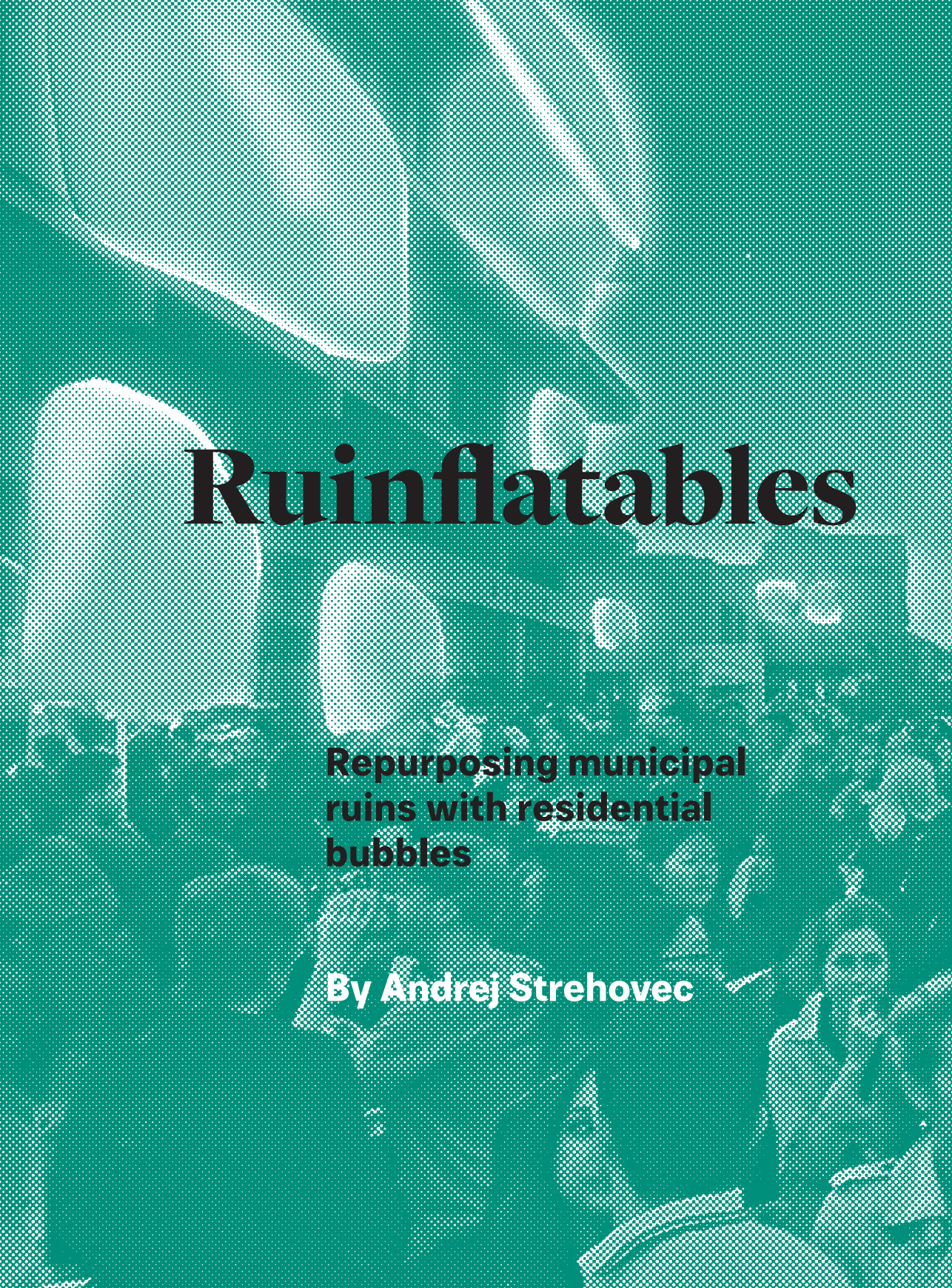

Ruinflatables

Repurposing municipal ruins with residential bubbles

By Andrej Strehovec

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"It is easy to build a house-object, but the way of life is hard to change ... the challenge for the twenty-first century is infrastructure... architecture is not important." *

*Marjetica Potrč
on Radio Student Ljubljana,
December 2012

In the spirit of the 1970s blow-up experiments by Haus-Rucker-Co, architect Andrej Strehovec's inflatable IN-HABIT-ON capsules are a speculative proposal for bringing life back into municipal ruins.

IN-HABIT-ON is an experimental concept for future dwelling possibilities that integrates technologically autonomous inflatable capsules into abandoned municipal infrastructure with the ambition of establishing an emancipatory society.

As western society continues with its need to build, arrange and decorate new living environments, IN-HABIT-ON proposes a practice of habitation that is enacted within the rehabilitation of abandoned settlements. Existing, healthy structures are reused and abandoned infrastructure is repaired or hacked.

Instead of producing new building materials, a technologically autonomous, portable, inflatable module is developed: IN-HABIT-ON. It provides a secondary shelter

Andrej Strehovec

Andrej Strehovec is a graduate of the Faculty for Architecture at the University of Ljubljana. He has been a practicing architect since 2003, working on projects which have included public buildings and housing as well as interior design. He founded Strehovec Architecture in 2014. Since 2010, he has been a regular contributor to *Piranesi* magazine (Central-European Architectural Magazine for the Culture of the Environment), writing in the field of architectural theory, while also contributing online and to radio discussions on the subject. He is an active collaborator and exhibitor internationally working on intermedia art projects at the intersection between the humanities and natural science.

Previous page: IN-HABIT-ON Cyprus. Graphics: Andrej Strehovec and Sanja Bilinović. Photo: Imgur

This page: IN-HABIT-ON Antwerpen. Graphics: Andrej Strehovec and Sanja Bilinović. Photo: Dan Marbaix

shell, enabling integration within old built-structures, which act as primary construction shells. This new infrastructural architecture incorporates neo-eclecticism, technology driven design and hacked communal infrastructure.

“The future will be utopian, or there will be none.” *

*Slavoj Žižek, *The Reality of the Virtual,* 2004

The capsule-like shells of IN-HABIT-ON are made of a multi-layered synthetic material that provides structural stability. This inflated hard-wall material is already in use in the boat industry. Inner and outer layers of the hard-wall are made from cut-resistant and air-tight polyvinyl chloride (PVC) fabric. These two layers are connected by a strong PVC yarn, forming a sandwich-like membrane. When this membrane is inflated with air under very high pressure, it provides an extremely solid surface that can withstand puncture and impact. It also functions as an insulation wall, maintaining and preserving the microclimate of the interior.

PVC membrane is fully recyclable and ideal for reprocessing. It is also inexpensive to make, requires minimal maintenance when in use, and is extremely durable. It is commonly used to make long-lasting products, often with a life expectancy exceeding 60 years. Thanks to its unique polymer structure, it is well suited for mechanical and feedstock recycling when it comes to

the end of its life. Feedstock recycling is where waste is broken right back down into its basic chemical molecules, which can then be used again to make PVC or other plastics. This enables the production of a new module by simply using the remains of the old one if necessary.

Each IN-HABIT-ON module is an inflatable membrane, with auto-open-vacuum-gap, it has a condensation and bio-filter device to collect water, a sewage filtration device, an energy bacteria laboratory in combination with solar-energy generator and an ultra-sonic personal shower.

The IN-HABIT-ON would be lightweight and easy to transport by a personal electric vehicle.

IN-HABIT-ON reinstates habitation as a priority over the museological or historicist approach of preserving architecture solely for cultural or luxury purposes. The project addresses pre-existing structures, abandoned for varying reasons, and reveals possibilities for their sustainable rehabilitation and upgrade with minimal environmental impact using minimum energy or logistical input. It combines temporary lifestyles – such as squatting or camping – with progressive technology and life values.

As shown in the accompanying images, the chosen sites have some common characteristics: they present abandoned building locations, both within settlements or a public spaces. The structure of the abandoned buildings needs to be stable, or at least offer a fair possibility of remediation. The chosen sites should also provide some kind of desirable public or natural environment that offers potential for easy restoration and implementation. Existing municipal water supplies, sewage systems, electricity cables and urban context are also part of the

necessary basis for rehabilitation of old settlements. The site in Novi Sad, Serbia, for example, presents a tower block – formerly a workers' university – which was left derelict after a fire in 2000 and has been abandoned ever since despite its central location in the city. Utilising the skyscraper's construction and internal infrastructure, the IN-HABIT-ON capsules could be used as temporary shelters in this concentrated urban area. The shelters can help to prevent social degradation and stagnation within the city centre as well as maintain other local public services until the full restoration of the building.

The same temporary inhabitation and maintenance concept could be applied to the site in Antwerp, Belgium. This case study is located in the interior of the nineteenth-century neo-gothic Stock Exchange building. The first stock exchange building in the world, originally built in 1531, it was destroyed by fire and reconstructed in 1872 but has been closed since 2003 due to modern fire regulations.

The site in Varosha, Cyprus, was a modern tourist area that had been left uninhabited since the Turkish invasion in 1974, and the fishing village site at Shengshan (China) was abandoned because of the diversification of economic production, which had a catastrophic impact on the local fishing industry. Both sites are located in a warm climate, which is attractive for tourism. IN-HABIT-ON capsules could be used to establish new tourist infrastructure, or provide a living environment for a community.

IN-HABIT-ON provides a platform for projecting future human existence, establishing values of a technologically and culturally developed society. The platform offers a solution through criticism of the existing consumerist

Previous page: IN-HABIT-ON Infrastructure. Graphics: Andrej Strehovec. Photo: Hei Jiaoshi, Imaginechina, Corbis

This page: IN-HABIT-ON Neoplanta. Image: Andrej Strehovec

social establishment, redundancy of social development politics, criticism of corporate driven migrations, with an idea of the establishment of a future autonomous, emancipatory society. The project also stimulates the establishment of temporary but high quality environments for living, which can respond to the needs of the nomadic societies arising from ever-increasing global migration. ■