From September 2012, Prof. Winy Maas will be guest professor at the faculty of Architecture at ETH Zürich. He will teach with his research think tank, The Why Factory.

The Why Factory is a global think tank on urban futures and is led by Prof. Winy Maas (MVRDV). The Why Factory’s Future Cities research programme explores the possibilities for the development of our cities by focusing on the production of models and visualizations for the cities of the future. The results of this research programme are being presented in exhibitions, films and a series of books - the Future Cities Series – published in association with NAI Publishers, Rotterdam.

The Why Factory is based at the Faculty of Architecture at the Delft University of Technology, but it regularly collaborates internationally with academic, cultural and private institutions, such as Aedes Campus Network Berlin (ANCB); Berlage Institute, Rotterdam; JUT Foundation for Arts and Architecture, Taipei; Strelka Institute, Moscow and the Total Museum of Contemporary Art in Seoul.

The research of The Why Factory can be seen as a triangle: Model Cities are used to explore a topic without a location or geographic context in all its possible consequences for the future of cities. View projects explore a specific location, related to one or more urgencies. The controller is a software for evaluation and projection, which absorbs the quantifiable outcomes of the other two parts of the triangle. Previous and on-going research projects of The Why Factory include Green Dream, World Wonders, Leisure City, Hong Kong Fantasies, Robotic City, Austeria, BiodiverCity, EuroHigh, Vertical Village, AnarCity, 4-Min-City, Copy/Paste and more.

We make future cities!

www.thewhyfactory.com
Examples of previous projects of students of the Why Factory

Sunny Water Lelies, Green Dream publication

Artificial lake in the Sahara mitigates rising water levels

Graduation project David Koezen

Transformer City, Graduation Project Khalid Stockpile

Biodiverse transformation Amsterdam, MSc2 studio Biodiversity

Vertical Village design Yushang Zhang, Rajiv Sewtahal, Riemer Postma and Qianqian Cai

All inclusive, Graduation project Tanya Martinez en Mick van Gemert

Food City Studio, MSc2 design

Food City Studio, MSc2 design

BiodiverCity Studio, MSc2 design Paul van Den Hob, Joost De Bont

5 Min.-City, Graduation project Chris Cornelissen

Urban Farming Barcelona, MSc2 design Magnus Svensson, Nicola Placella

Eurohigh Studio, MSc1, MSc2
THE TRANSFORMER

Life in the real-time adaptive, constantly changing city

In today's cities and buildings, we see a growing invasion of ambient technologies. We got used to light turning on when we enter a room, traffic lights adapting during rush hour and autopilots steering jumbo jets. Even the smart fridge that orders food and turns on the oven while suggesting dinner receipts to you became reality and is being launched later this year. (1)

In the Transformable City project, we take this development a step further. The city reacts physically. Buildings can move, expand or shrink. Public space can adapt to different requirements. Spaces can transform to your desires. Your apartment can fluently change from bedroom to bathroom, to lounge or sun deck or shrink and almost disappear if you are not home.

New Interfaces

In this studio, we want to explore the interaction between a constantly changing, adapting city and it's users. If your wall can change into a bed, a window, a bathroom – how do you tell your wall what you want? If the city can adapt to different needs of social interaction or quiet privacy, how does it ask the citizens what they want? How dynamic can the city react if different users have different desires? What images can we expect from a city, which is constantly re-made, re-build by it’s users?

To explore these questions, the assignment of this studio contains three parts: Scripting and sensors, scenario making and interactive installation.
Interactive installation

The scenarios are used to create a number of interactive installations. The models remain virtual, but are projected in a spatial arrangement. The sensors are connected to the installation. The transformable city reacts in real time to its visitors...

Studio structure

We will meet weekly, on Tuesdays and Wednesdays. You will learn to use Rhino, Grasshopper and various plug-ins to create interactive models. Next to these tutorials, we will give you an introduction to the research of The Why Factory, to current developments robotics, interfaces and interactivity. The scenarios and the installation will be developed in groups and as a collective effort. In the last phase, you will critically reflect in a short article on the outcome of this research and design project and comment on the possible future applications.

Basic skills in parametric software as Rhino and Grasshopper are an advantage, but not strictly required. On the other hand, a proactive approach and high motivation are definitely needed as well as openness to experiment, to work collectively and to engage with the unknown. We invite you to play the game!

The studio is led by:

Prof. Winy Maas with
Ulf Hackauf,
Adrien Ravon,
Stefan Wülser

1. LG presented the Smart Appliance concept on the Consumer Electronics Show in January 2012: http://www.lgnewsroom.com/ces2012/
2. Grasshopper is a plug-in for Rhino for simple, graphic based scripting: http://www.grasshopper3d.com/
3. Arduino is an cheap, open-source microcontroller, which connects to your computer and makes the data of connected sensors available for interactive modeling: http://en.wikipedia.org/wiki/Arduino
The kickoff of the studio will take place on Tuesday the 18th of September

Room to be announced.