tarlabasi

datascope

measuring complexities exploring potentials
c o m p u t a t i o n a l   s u p p o r t
for alternative urban interventions

Computational Urban Analysis, Synthesis Methods and Techniques International Workshop:

@ ITU Istanbul, May 13th-20th, 2013

A collaborative research-oriented design initiative of I T U , T U D e l f t , F A U T L

hosted by Architectural Design Computing Graduate Program Faculty of Architecture- Istanbul Technical University

Exploring Computational Urban Analysis-Synthesis Methods and Techniques Supporting Urban Intervention Scenarios for TARLABASI

GOALS
The aim of the workshop is to propose urban intervention scenarios for a historical deteriorated neighbourhood of Istanbul; Tarlabasi. Tarlabasi neighbourhood is currently subject to urban renewal consisting of a massive demolishment and large-scale constructions, leaded by Istanbul Metropolitan Municipality. The urban renewal approach applied by the municipality is seriously criticized for not respecting existing historical urban patterns and social networks. Therefore, in this workshop we aim to produce alternative urban intervention scenarios on how Tarlabasi can be transformed without destroying its original character.

Within this framework it is very important to identify site-specific particularities of Tarlabasi to further incorporate them into urban intervention strategies. We therefore introduce various computational urban analysis methods and techniques as a toolset that enables identification of diverse aspects of the site. In the scope of our workshop we will test how this toolset can be used to support design decisions in an inner-city urban intervention problem.

PROGRAMME
Day 1: Monday, May 13th
09:30-10:00 Lecture [intro] A. Sokmenoglu, J .Beirão and P. Nourian
10:15-11:00 Lecture [context] Urban transformation in Tarlabasi - A. Sokmenoglu
11:00-14:00 Tarlabasi Site Visit
14:00-18:00 Urban Intervention Studio [analysis+1st intervention ideas]

Day 2: Tuesday, May 14th
09:30-10:15 Lecture [tools] A. Sokmenoglu - Data Mining
10:30-11:15 Lecture [tools] J. Beirão - Parametric Urban Design
11:30-12:15 Lecture [tools] P. Nourian - Configurative Design (Analysis, Synthesis and some hints on Evaluation)
14:00-16:00 Brainstorming - 1st Presentations [analysis+1st intervention ideas]
16:30-18:00 Urban Intervention Studio [computational analysis]: introduction to analytical methods and tools - data mining - A.Sokmenoglu

Day 3: Wednesday, May 15th
09:30-18:00 Urban Intervention Studio [computational analysis + synthesis] Network analysis, accessibility analysis, walkability assessment. Integration of analysis and design tools in parametric design environments - P. Nourian

Day 4: Thursday, May 16th
09:30-12:30 2nd Presentations [computational synthesis + intervention strategies]: parametric urban design tools; density indicators and their calculation in Grasshopper. Available urban design variables in a Grasshopper test models. Guidance for scenario exploration - J. Beirão
14:00-18:00 Urban Intervention Studio [final proposals]

Day 5: Friday, May 17th
09:30-12:30 Urban Intervention Studio [final proposals]
14:00-18:00 Urban Intervention Studio [final proposals]

Day 6: Monday, May 20th
09:30-12:30 Urban Intervention Studio [final proposals]
14:00-18:00 Final Presentations

PARTICIPATION
The participation in the workshop is opened to anyone interested in developing advanced skills in computational urban analysis and synthesis methods and techniques. Therefore, the workshop is opened to students of 4th year, MSc and PhD from architecture and urban planning.
The participation in the Workshop requires previous registration.
The registration can be made by adressing at:

tarlabasidatascope@gmail.com
Deadline for registration: May 1st, 2013

Registration fee: 50 Euros
Late registration: 100 Euros
Workshop Participation is free for ITU students. Still, previous registration by e-mail is required. Any questions may be addressed at tarlabasidatascope@gmail.com

For academic purposes, the participation in the workshop will have 3 ECTS credits value.
The organization will deliver a certificate to all participants.

AGENDA
All workshop instructors attend Urban Intervention Studios for technical support and consultation.
In Tarlabasi there are buildings, which are all empty, and buildings that have no historical or architectural importance. In the workshop, after analysing Tarlabasi by means of various methods and techniques, including GIS, data mining, density & land-use analysis, based on their findings and their design intentions/concepts, they can propose:
-a general strategic scenario for transformation of Tarlabasi;
-urban design proposals such as new buildings, new functions, new public spaces etc. that will enable this strategic scenario to materialize.
Students may analyse the following subjects:
- land-use patterns. Data mining land-use will enable participants to explore the existing land-use patterns of the neighbourhood and identify the programmatic needs in order to support the formulation of a list of program requirements to take into consideration as needs or opportunities for urban intervention;
- accessibility to specific nodes;
- street networks including,   walkability assessment, distribution tools, network analysis;
- geographical analysis of built form density, land-use and their patterns.
- correlations of the previous analysis will be encouraged as a means to find significant strategic approaches for future interventions.

TOOLS
GIS software (QuantumGIS); Rhino 5 + Grasshopper + Slingshot; RapidMiner
At the end of the analytical procedures students will be able to support their scenarios and build parametric models where variations on design variables may be entered to test or fine tune scenarios or particular proposals.

INSTRUCTORS
Jose Nuno BEIRAO from TU LIsbon, PhD TU DELFT [Member of City Induction with José Pinto Duarte, Nuno Montenegro, Jorge Gil]
Pirouz NOURIAN from TU Delft, PhD Candidate -TU DELFT [Chair of Design Informatics]
Ahu SOKMENOGLU from ITU, PhD Candidate -TU DELFT&ITU [Chair of Design Informatics] & [Architectural Design Computing]

ORGANISATION
ITU - Architectural Design Computing Graduate Program [Chair: Prof. Dr. Gulen Cagdas]
TU DELFT - Design Informatics [Chair: Prof. Dr. Sevil Sariyildiz, also Dean of Architecture, Interior Architecture & Environmental Design of Yasar University-Izmir]
TU LISBON - FAUTL [Chair: Prof. Dr. Jose Duarte]

http://www.tarlabasidatascope.wordpress.com

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