

## **11<sup>th</sup> International Space Syntax Symposium**

### **Workshop 2**

#### **'Space Syntax Toolkit' for QGIS – introduction and recent developments**

**Where:** Calouste Gulbenkian Foundation, Conference Centre, Room 1

(Please refer to the Symposium website for more details)

**When:** 3<sup>rd</sup> July 2017, 9:30 – 16:30

#### **Event description:**

Over recent years GIS has become an essential platform to carry out all sorts of spatial data management, analysis and visualisation of the built environment, in particular at the urban and regional scales. The space syntax research community has also been demonstrative of this trend, with tools such as Axwoman, Confeego or Place Syntax being developed for commercial GIS platforms. The “Space Syntax Toolkit” (SST) is an open source QGIS plugin for spatial network and statistical analysis. It provides a front-end for the depthmapX software within QGIS, offering seamless space syntax axial and segment analysis workflows in a GIS environment.

The aim of this workshop is to give participants a first-hand experience of the SST, to learn about its new tools, and to explore the different workflows necessary to carry out space syntax related research. This includes data preparation, network model preparation (axial and road centre line), network analysis, results visualisation and simple statistical analysis.

If you're giving the first steps into GIS for space syntax research, then this workshop will ease you into the process by introducing you to this user-friendly tool. If you already use QGIS, then this is the opportunity to learn about the latest developments of the SST, discuss its possibilities beyond the typical workflows, and contribute to its future development.

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**Programme:**

**09:30 Introduction to the workshop**

09:45 Overview of space syntax theory and methods, and the SST project

10:00 Task 1: Preparing and analysing axial models

**11:00 Break**

11:15 Task 2: Preparing and analysing road centre line models

12:30 Visualisation and discussion of the results

**13:00 Lunch Break**

14:00 Task 3: Preparing other urban data layers

15:00 Task 4: Connecting and analysing the various results

16:00 Questions and discussion on QGIS methods for space syntax research

**16:30 Close**

**Requirements:**

Participants must bring their own laptops in order to carry out the practical tasks, with the necessary software pre-installed:

- QGIS 2.14 LTR (or higher): <http://qgis.org/en/site/forusers/download.html>
- depthmapXnet 0.35: <http://archtech.gr/varoudis/depthmapX/?dir=depthmapXnet>
- Space Syntax Toolkit:  
<https://github.com/SpaceGroupUCL/qgisSpaceSyntaxToolkit/wiki/Installation>

**Preparation:**

In order to make the most of the workshop, participants should be familiar with space syntax concepts and methods, depthmapX and with the QGIS software. The different materials listed on the following page will provide an introduction to the above topics:

<https://github.com/SpaceGroupUCL/qgisSpaceSyntaxToolkit/wiki>

Participants that do not need such an introduction are invited to become familiar with the current version of the SST, or prepare their own data and questions to bring to the workshop.