

Report on RISIS Summer School

Title of the course

RISIS Geo Summer School / Geocoding and clustering of large ST&I corpuses

Venue

LISIS-IFRIS-Université Paris-Est Marne-la-Vallée, ESIEE Paris

Date

From 4th to 8th July 2016

Organizers

Lionel Villard, Philippe Larédo, Patricia Laurens, Antoine Schoen

With presentations and practical sessions:

- *EUPRO, database on EU Framework Programmes Michael Barber, Barbara Heller-Schuh, Marlies Züger and Thomas Scherngell (Austrian Institute of Technology)*
- *The Metropolis Concepts and Definitions (with Special Emphasis on the OECD's FUA) Emil Israël, and Daphne Getz (Samuel Neaman Institute, Technion, Israel Institute of Technology)*
- *Using Linked Open Data for Delineation of Functional Urban Areas Ali Khalili, and Peter van den Besselaar (Vrije Universiteit Amsterdam)*

Objectives

From 4th to 8th July 2016 in Paris, UPEM hosted a RISIS summer school dedicated to geographical treatments of S&T datasets. The leaflet presenting the course can be found on the RISIS website (<http://risis.eu/event/geography-training/>).

We have observed that most S&T datasets have limited geographical data while we more and more discuss these aspects with open debates about the world becoming 'flatter' or on the contrary witnessing strong agglomeration phenomena. Using addresses enables to build geographical variables and study other effects such as the role of proximities, the existence and identification of clusters, and how locations are embedded in multiscale geographical networks. One important aspect is to develop visualisations that help grasping more easily complex analyses and discuss the relevance of established boundaries and classifications of spaces (such as OECD Functional Urban Areas).

As these processes require both a theoretical background and strong technical steps, we have designed this summer school both as a moment of synthesis of the different approaches & tools, while offering practical sessions addressing the participants' datasets, with the objective to go through the different steps, from enrichments to mapping. Thus the five days of the summer school were based on examples, research outputs and methods or services, mobilized or developed by RISIS project, and scientific presentations on how to geocode toponyms and to build geographical clusters (UPEMLV), on Functional Urban Areas (SNI), and on how to link FUA with open data (VU, SMS).

Main results

Participants, for those who had their own dataset, were able to geocode, cluster their addresses, and draw first geographical maps.

Participants had theoretical overviews on each steps (geocode, geographical clusters, metropolitan areas, geographical maps)

Assessment of the Summer School

- Main strengths

The summer school was well organized, it provides rich materials, and a deep understanding of the conceptual framework mobilized.

The presentation of the SMS services was a great added value.

The theoretical overview of what is an urban area was a great added value.

- Main limitations

The software and scripts provided had some compatibility issues on Mac OSX operating system.

- Room for improvement

Build more step by step tutorials for the geocoded and clustering steps.

Be more than one person to manage the participants, with one or more teacher assistant.

- Further suggestions

More social activities, e.g. a summer school diner in Paris (and not only in Noisy Champs)

List of participants: **see ANNEX 1**

Programme: **see ANNEX 2**

Assessment: **see ANNEX 3**

Materials: **available at <http://risis.eu/event/geography-training/>**

ANNEX 1

LIST OF PARTICIPANTS

Stahlschmidt	Stephan	stahlschmidt@dzhw.eu	DAHW / Deutsches Zentrum für Hochschul- und Wissenschaftsforschung
Tenca	Francesca	francesca.tenca@polimi.it	Politecnico di Milano
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Laurens	Patricia		ESIEE Paris
Van den Besselaar	Peter	p.a.a.vanden.besselaar@vu.nl	VU
Khalili	Ali	a.khalili@vu.nl	VU
Laredo	Philippe		ENPC/Manchester/ESIEE Paris
Villard	Lionel		ESIEE Paris/LISIS
Breucker	Philippe		INRA/LISIS
Orsal	Guillaume		LISIS

ANNEX 2 PROGRAMME

RISIS GEO SUMMER SCHOOL Geocoding and clustering of large ST&I corpuses

From 4th to 8th July 2014 in Paris, UPEMLV will host a RISIS summer school dedicated to geographical treatments of S&T datasets. The leaflet presenting the course can be found on the RISIS website (<http://risis.eu/event/geography-training/>).

We have observed that most S&T datasets have limited geographical data while we more and more discuss these aspects with open debates about the world becoming "flatter" or on the contrary witnessing strong agglomeration phenomena. Using addresses enables to build geographical variables and study other effects such as the role of proximities, the existence and identification of clusters, and how locations are embedded in multiscale geographical networks. One important aspect is to develop visualisations that help grasping more easily complex analyses and discuss the relevance of established boundaries and classifications of spaces (such as OECD Functional Urban Areas).

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PRESENTATIONS

EUPRO, database on EU Framework Programmes Michael Barber, Barbara Heller-Schuh, Marlies Züger and Thomas Scherngell (Austrian Institute of Technology)

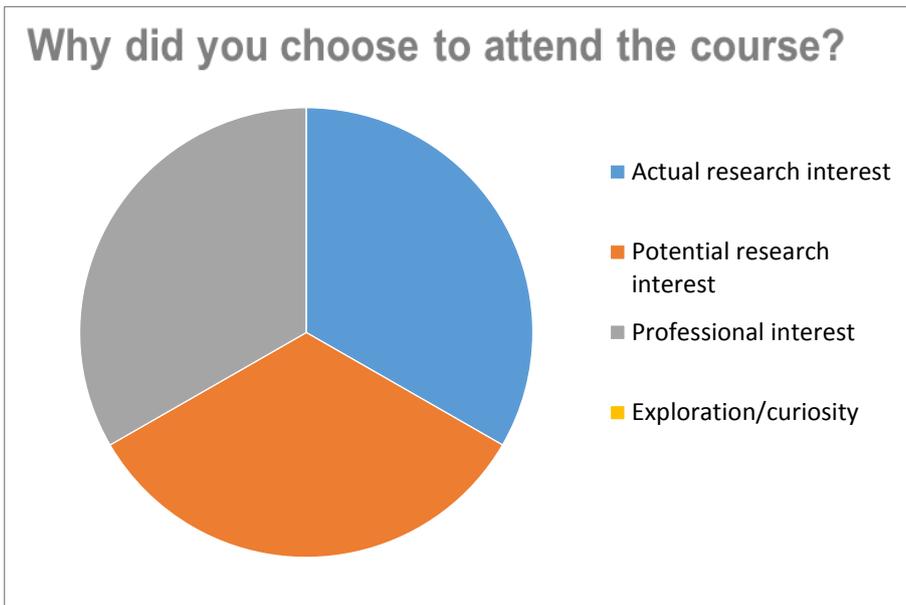
The Metropolis Concepts and Definitions (with Special Emphasis on the OECD's FUA) Emil Israël, and Daphne Getz (Samuel Neaman Institute, Technion, Israel Institute of Technology)

Using Linked Open Data for Delineation of Functional Urban Areas Ali Khalili, and Peter van den Besselaar (Vrije Universiteit Amsterdam)



MONDAY, JUL. 4		THURSDAY, JUL. 7		
13:30-14:00	WELCOME COFFEE (ESIEE PARIS Salle du conseil)	9:00-12:30	Using Linked Open Data for Delineation of Functional Urban Areas Ali Khalili, and Peter van den Besselaar (Vrije Universiteit Amsterdam), room: 1207	
14:30-16:00	Geocoding process: overview, toponyms, tools available Room: salle du conseil		RISIS Geo SMS Services demonstrations Ali Khalili, and Peter van den Besselaar (Vrije Universiteit Amsterdam), room: 1207	
16:00-18:00	EUPRO, database on EU Framework Programmes Michael Barber, Barbara Heller-Schuh, Marlies Züger and Thomas Scherngell (Austrian Institute of Technology), room: salle du conseil		LUNCH BREAK (ESIEE PARIS 394)	
	Technical implementations, examples from RISIS Room: salle du conseil	14:00-17:00	MAPPING PRACTICAL SESSIONS	
TUESDAY, JUL. 5			Mapping geo layers (clusters, FUA, others) Room: 1207	
9:00-12:30	PARALLEL PRACTICAL SESSIONS Geocoding of the datasets Discovering the geographical distribution Room: 1207		Mapping and analyzing networks Room: 1207	
	LUNCH BREAK (ESIEE PARIS 394)		SUMMER SCHOOL DINER (BIS)	
14:00-17:00	PARALLEL PRACTICAL SESSIONS Geocoding of the datasets Discovering the geographical distribution Room: 1207		FRIDAY, JUL. 8	
19:00-21:00	DINER (BIS)	9:00-12:30	Restitutions of the work and discussion Room: Salle du conseil	
WEDNESDAY, JUL. 6			PIC NIC & EXTRA ROOM	
9:00-12:30	GEOGRAPHICAL AGGREGATION	12:30-14:00	A room is booked Room: Salle du conseil	
	The Metropolis Concepts and Definitions (with Special Emphasis on the OECD's FUA) Emil Israël, and Daphne Getz (Samuel Neaman Institute, Technion, Israel Institute of Technology), room: 1207		Farewell pic nic	
	Approaches for bottom up clustering Based on examples from EUPRO FP3 dataset UPEMLV, room: 1207			
	LUNCH BREAK (ESIEE PARIS 394)			
14:00-17:00	PARALLEL PRACTICAL SESSIONS Installation of the software environment and building geographical clusters Maps: discovering the geographical concentration (convex hull) Room: 1207			

ANNEX 3 ASSESSMENT



RATINGS

<i>Were the course objectives clearly defined?</i>	
<i>Were the contents of the course consistent with the course description?</i>	
<i>Has this course stimulated your interest?</i>	
<i>Was the course well organized?</i>	
<i>Was the course well structured?</i>	
<i>Have teaching materials facilitated learning?</i>	
OVERALL SATISFACTION (scale 1-10)	<div style="border: 2px solid black; border-radius: 50%; width: 40px; height: 40px; display: flex; align-items: center; justify-content: center; margin: 0 auto;"> 8,2 </div>

BEST FEATURES

Presentations + SMS web services
 Vast and interesting material
 All material in Dropbox
 Well organized and presentations
 Interesting interdisciplinary presentations

ASPECTS TO IMPROVE

More step by step tutorials
 Complex implementation of the clustering
 More social activities
 Compatibility issues and bugs
 One more assistant teacher needed