

Université Sorbonne Paris Cité



Smartphone and Mobile Territories – Technical Knowledge Transformed into an Object Producing New Territorial Layers An Experience in the City of Strasbourg

REAL CORP 2018 Expanding Cities – Diminishing Space 4-6 April 2018 Vienna



Esin Ekizoglu, PhD student in Architecture, Dipl. Architect, Laboratory EVCAU , Laboratory ICT, Paris Prof. Dr. Elizabeth Mortamais, Dipl. Architect-Landscape Architecture, Laboratory EVCAU, Paris





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Structure of Presentation

- Introduction/Context
- Methodology
- Analysis and results
- Conclusion





The phenomenon of Big Data

- \Rightarrow accompanies the evolution of the use of the smartphones
- \Rightarrow and enriches it. (Weiss and Indurkhya, computer science, 1998 and Diebold, statistics/econometrics, 2000)





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The Smartphones

- \Rightarrow objects producing urban layers
- \Rightarrow one of the individualized technical objects
- evcAu
- \Rightarrow build a new urban relationship. (Picon, 2014)



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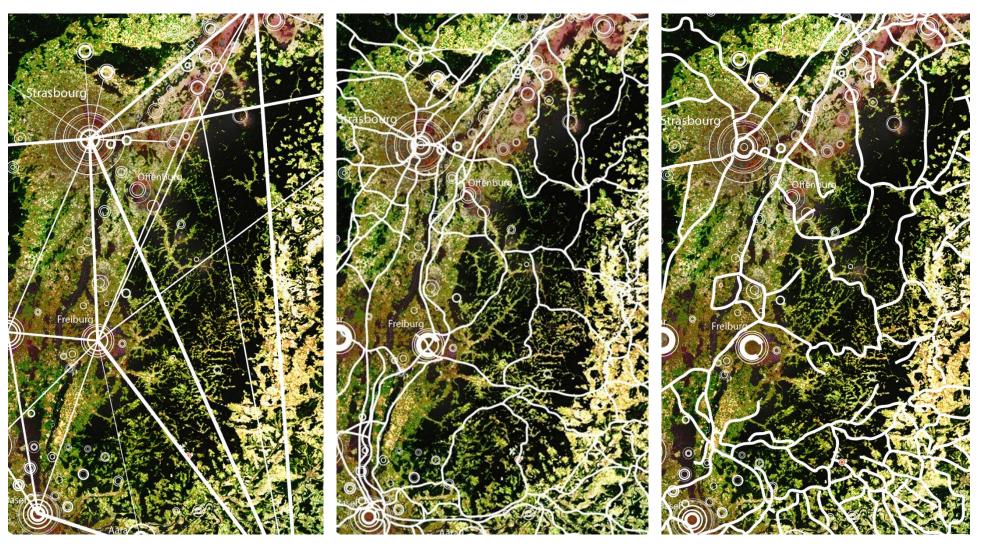
Our goal: to explore the links created by the smartphones by using the cartography of the city of Strasbourg and the principles of the Big Data phenomenon





Introduction/Context

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The place of Strasbourg in its context

Road axis The mash prioritizes the territory. Railway axis It is a discontinuous territory coverage.

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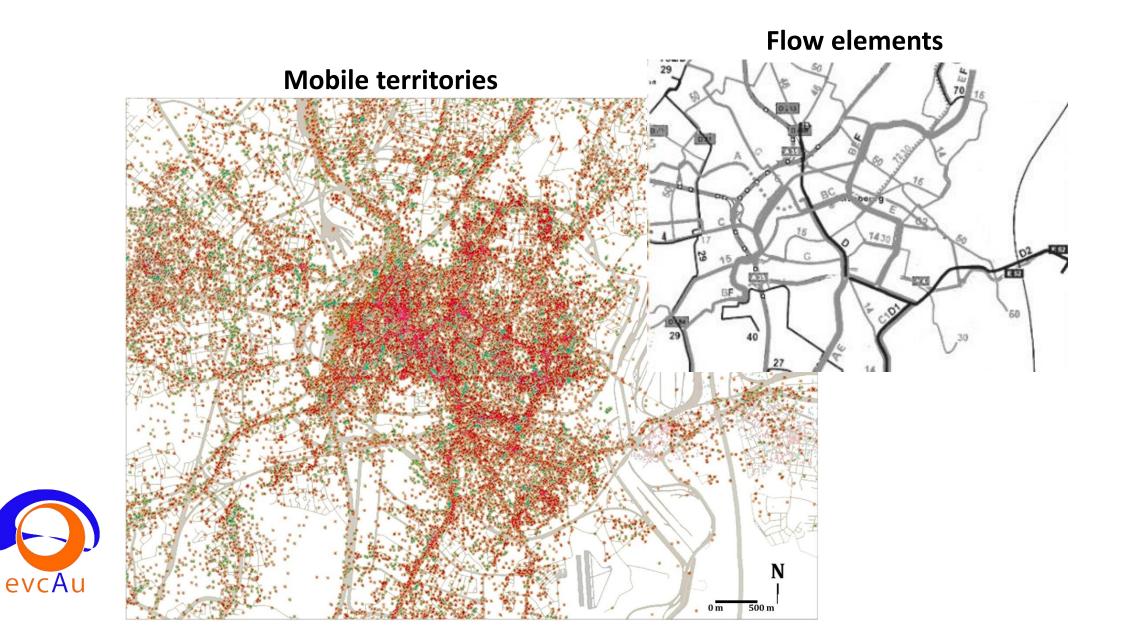
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Methodology

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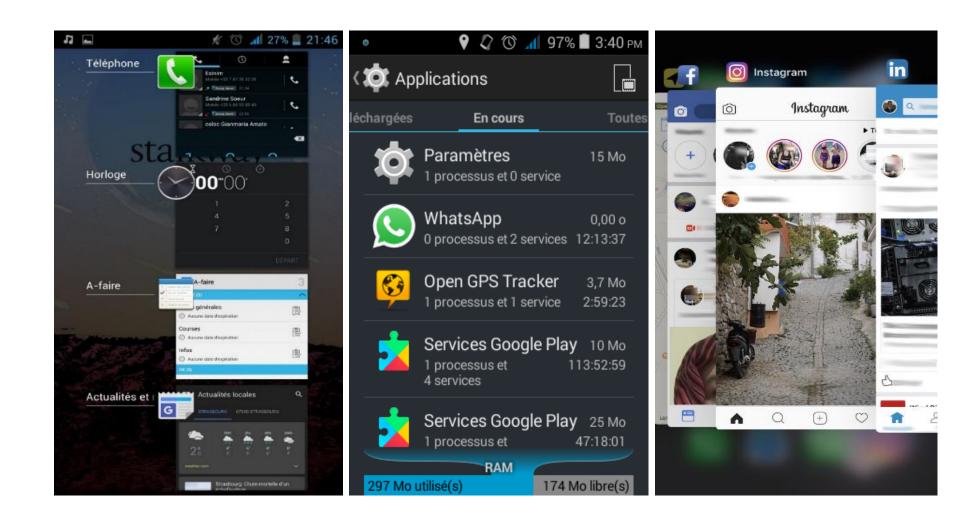
The study is done

- \Rightarrow by sending screenshots of the applications in use in public space.
- \Rightarrow with the record of the daily journeys via "Open GPS Tracker" application.
- \Rightarrow during one week.
- \Rightarrow in a total of 70 journeys.
- \Rightarrow by correlating and by superimposing cartographically physical places frequented



and digital activities carried out on each journey.

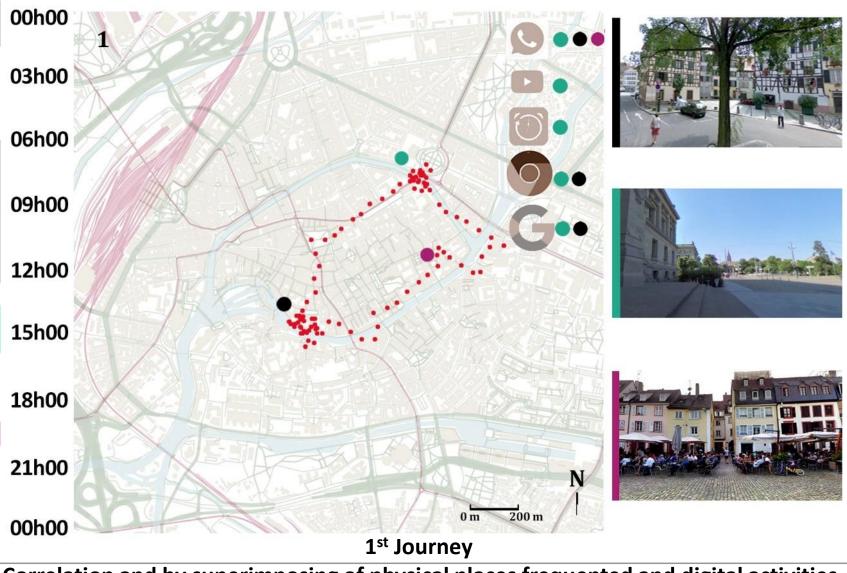
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Analysis and results







Correlation and by superimposing of physical places frequented and digital activities

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Analysis and results

Number Journey	of	Date	Distance (km)	Duration (h:s:ss)	Average (km/h)	Frequented places	Period of time		
#1		25/07/2017 (UTC+02:00)	2.0	21.04.18	0.1	District of "Haras" ⁽¹⁾ , "République" Square ⁽²⁾ , "Marché Gayot" Square ⁽³⁾	$00:00:00-13:34:13^{(1)}$ 14:09:02-17:36:30 ⁽²⁾ 17:42:05-19:03:26 ⁽³⁾ 19:22:16-21:04:18 ⁽¹⁾		
		Correlati	00h00 03h00 06h00 09h00 12h00 15h00 18h00 21h00 00h00	unerimnosing of	0 m 200 m				
evcAu Correlation and by superimposing of physical places frequented and digital activities									

Analysis and results

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Number of Journey	Date	Distanc e (km)	Duration (h:s:ss)	Average (km/h)	Frequented places	Period of time
#2	13/10/2017 (UTC+02:00)	20.1 21:43:44		0.9	Esplanade ⁽¹⁾ , Neudorf ⁽²⁾ , Esplanade ⁽³⁾ , Station area (Gare de Strasbourg) ⁽⁴⁾ , "Halles" Square ⁽⁵⁾ , Bischheim ⁽⁶⁾ , Meinau ⁽⁷⁾	00:00:00-00:24:05 ⁽¹⁾ , 00:29:44-12:36:48 ⁽²⁾ , 12:50:17-13:43:00 ⁽³⁾ , 13:52:03-15:17:39 ^{(2),} 15:23:15-15:37:15 ⁽³⁾ , 15:59:05-16:03:04 ⁽⁴⁾ , 16:14:07-16:20:04 ⁽⁵⁾ , 16:36:11-18:11:09 ⁽⁶⁾ , 19:03:26-21:43:44 ⁽⁷⁾
			 00h00 03h00 06h00 09h00 12h00 15h00 18h00 21h00 00h00 			



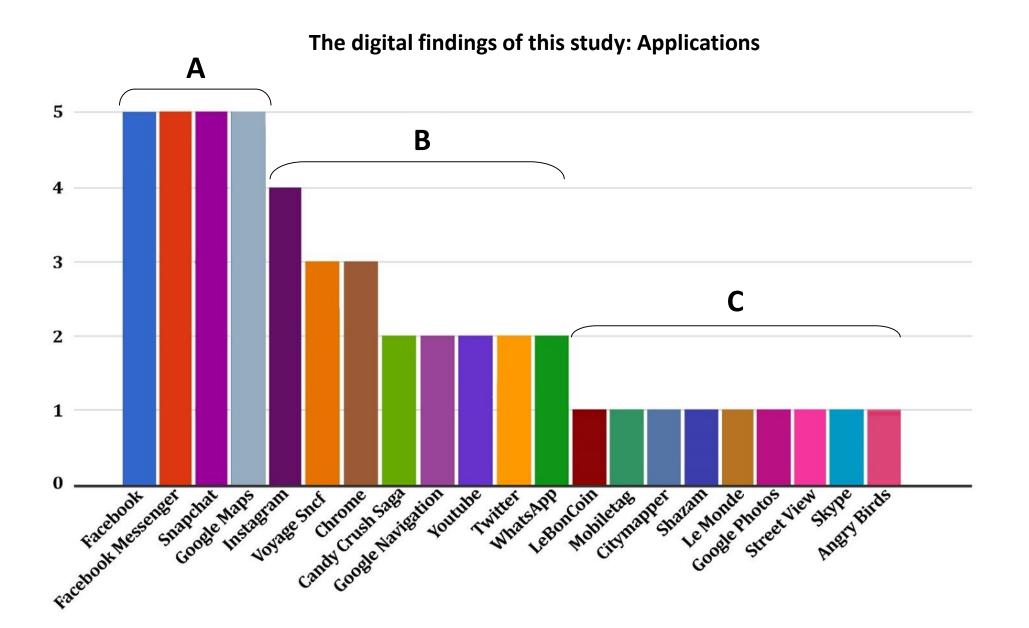
Correlation and by superimposing of physical places frequented and digital activities

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evcAu

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Conclusion

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- Our findings showed
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 becomes a means of change in the relationships between the people leading to social innovation; the use of the smartphones is an example.





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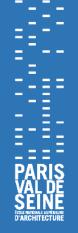
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- The technological knowledge
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- The permanent connective intelligence
 - represents a valuation of the forms of mobile territories;
 - will certainly lead to a territorial innovation.









Thank you

esin.ekizoglu@etu.univ-paris-diderot.fr elizabeth.mortamais@paris-valdeseine.archi.fr

