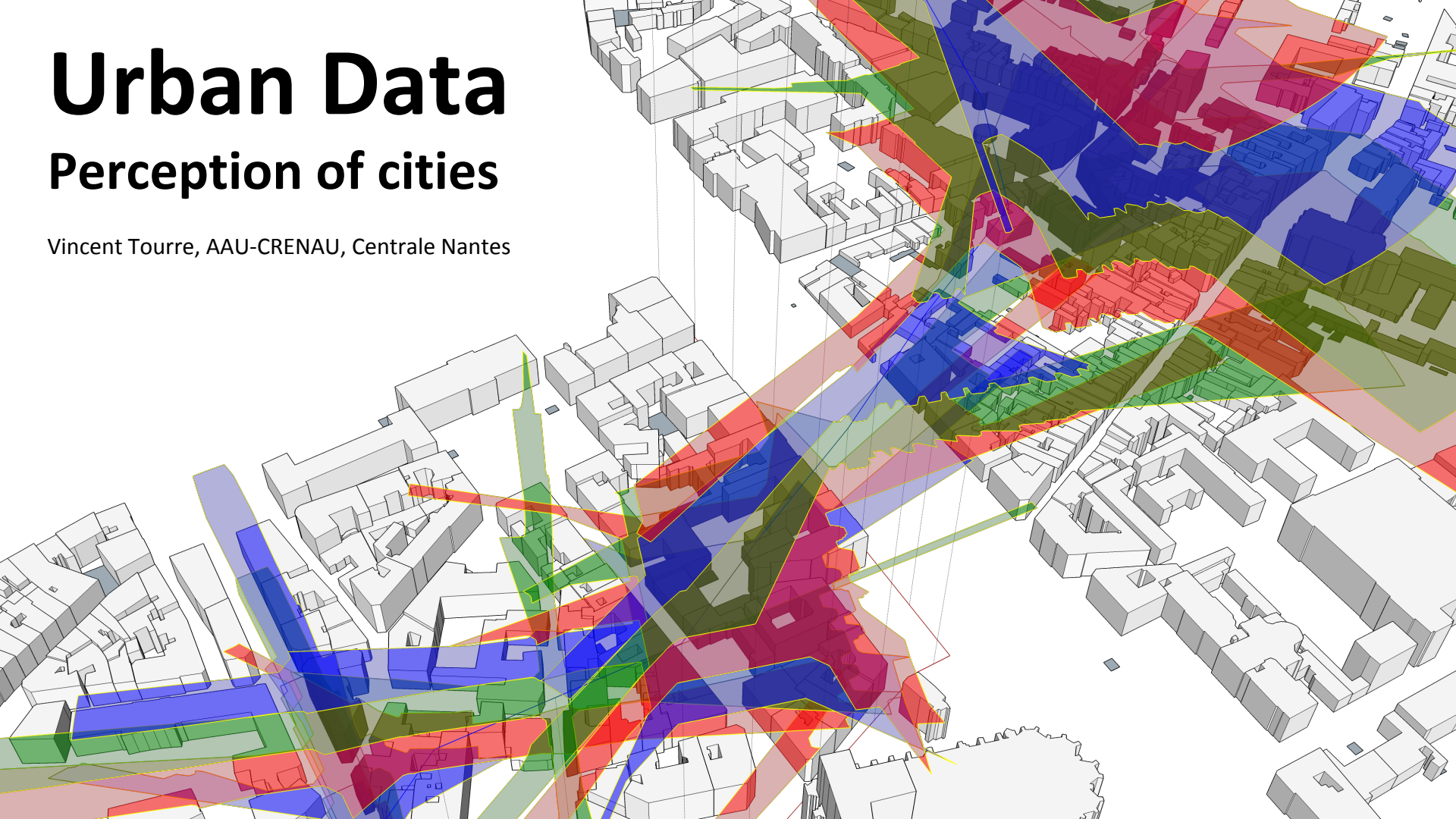
Urban Data

Perception of cities

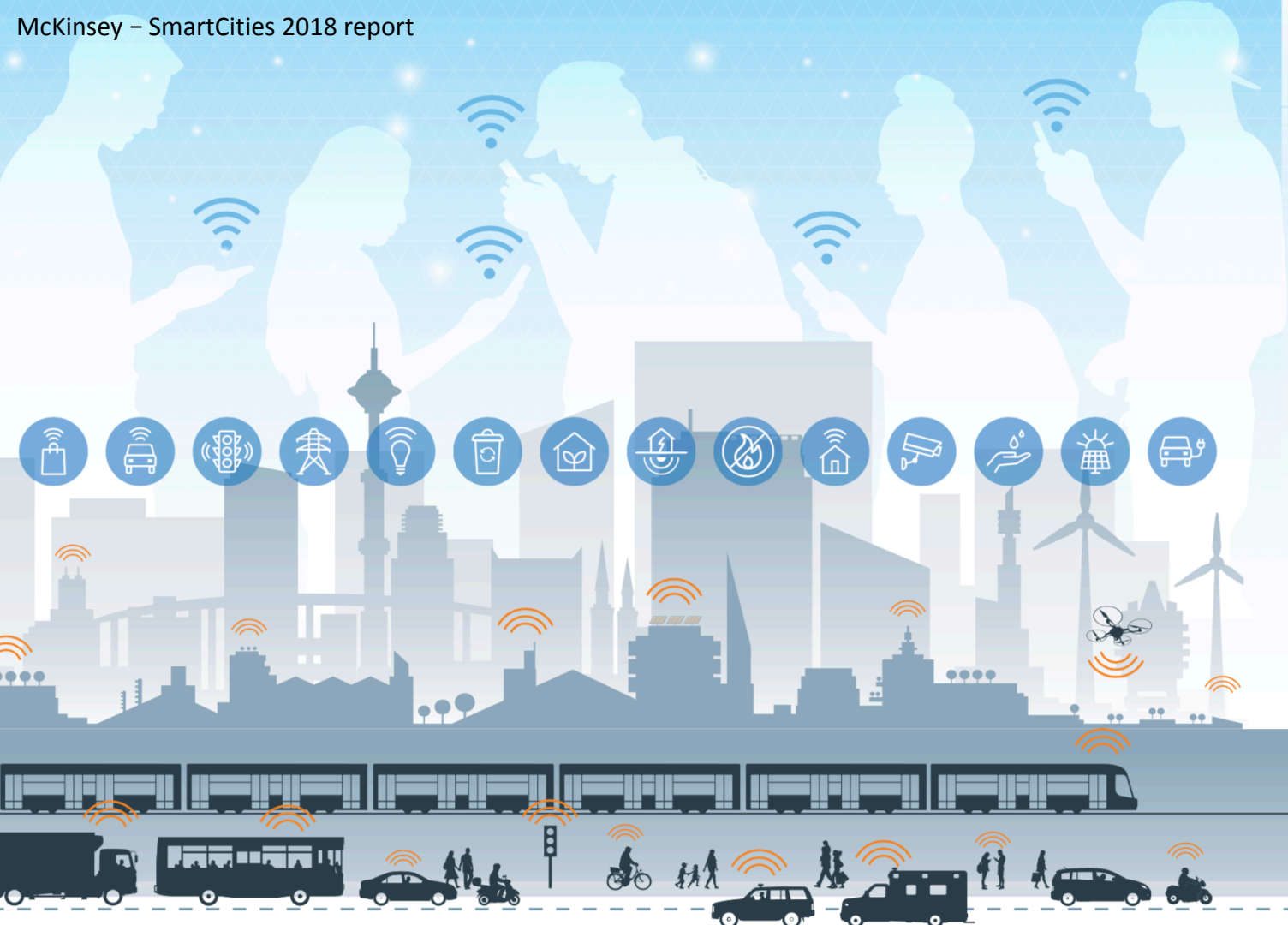
Vincent Tourre, AAU-CRENAU, Centrale Nantes



the city

Remember Me - Game Artwork

McKinsey – SmartCities 2018 report



Three layers of "smartness":

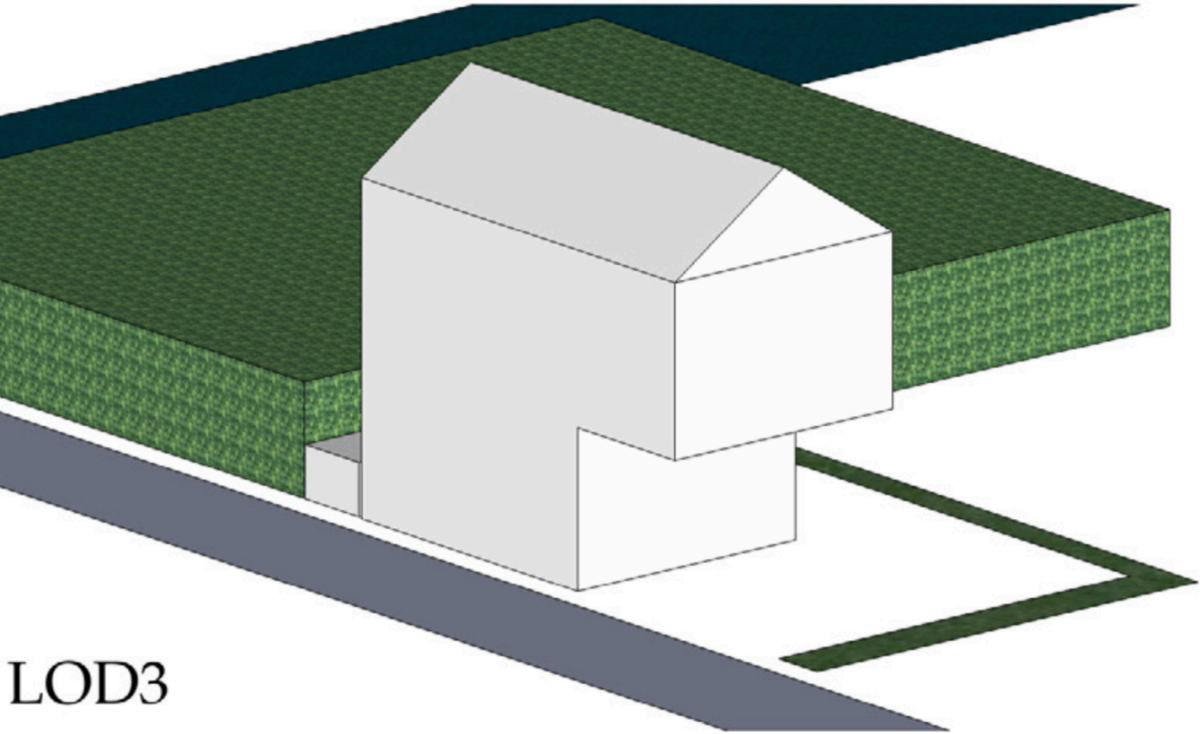
Adoption and usage, often leading to better decisions and behavior change

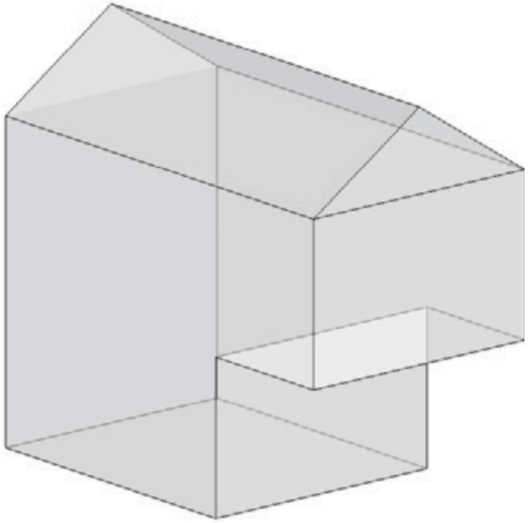
Smart **applications** and data analysis capabilities

The **tech base** includes networks of connected devices and sensors

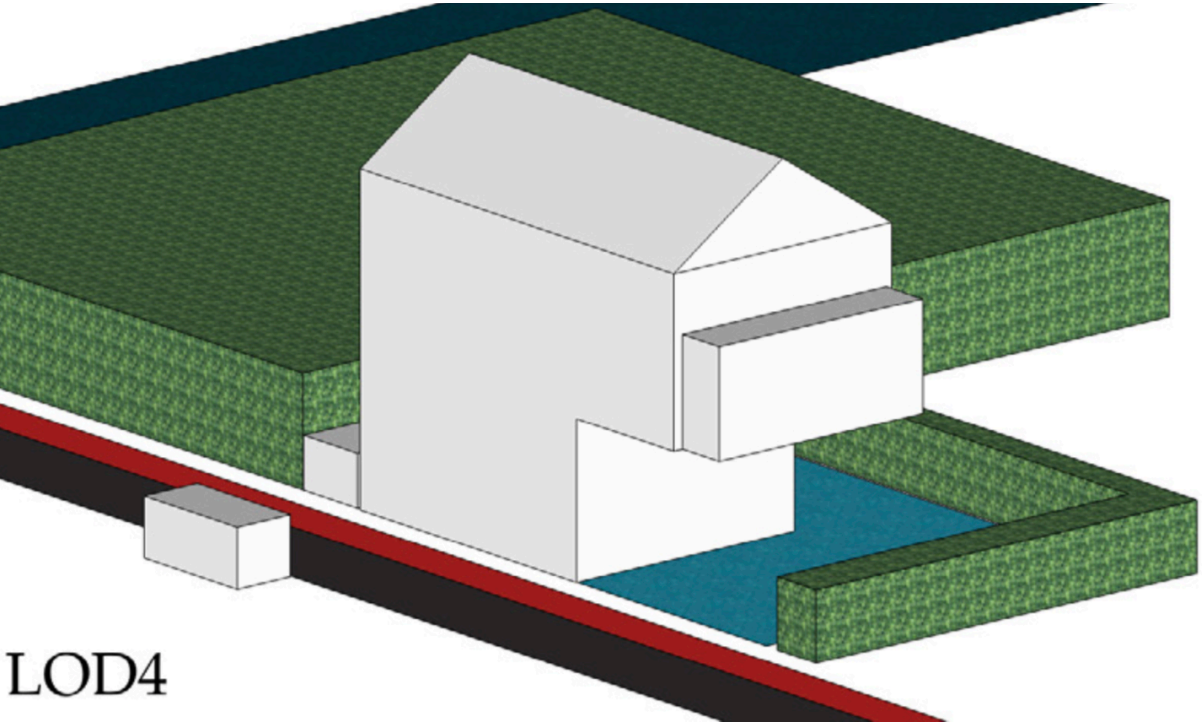
Traditional infrastructure (physical and social)

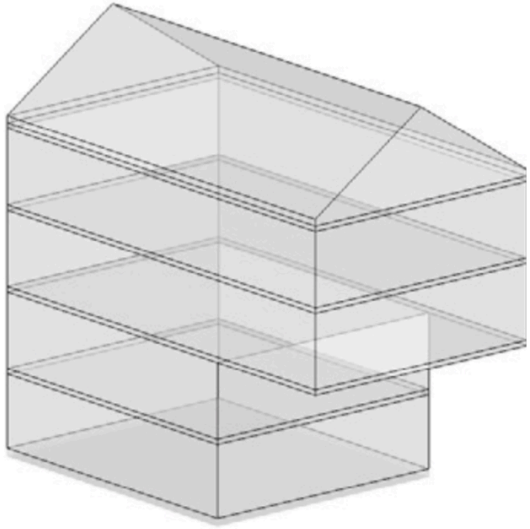
Formalisation of the level of detail in 3D city modelling, Biljecki et al. 2014



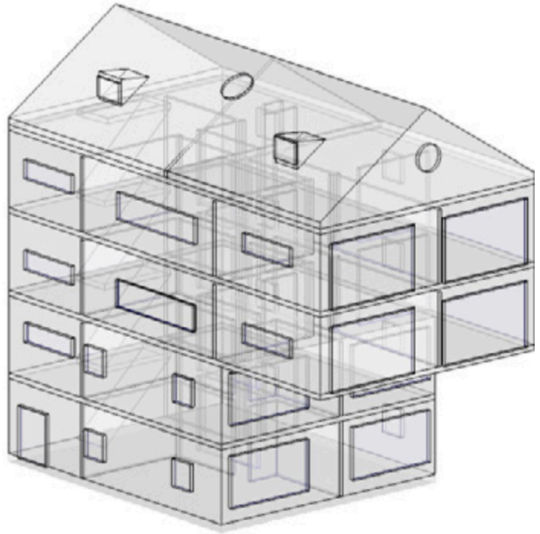


Formalisation of the level of detail in 3D city modelling, Biljecki et al. 2014





Formalisation of the level of detail in 3D city modelling, Biljecki et al. 2014



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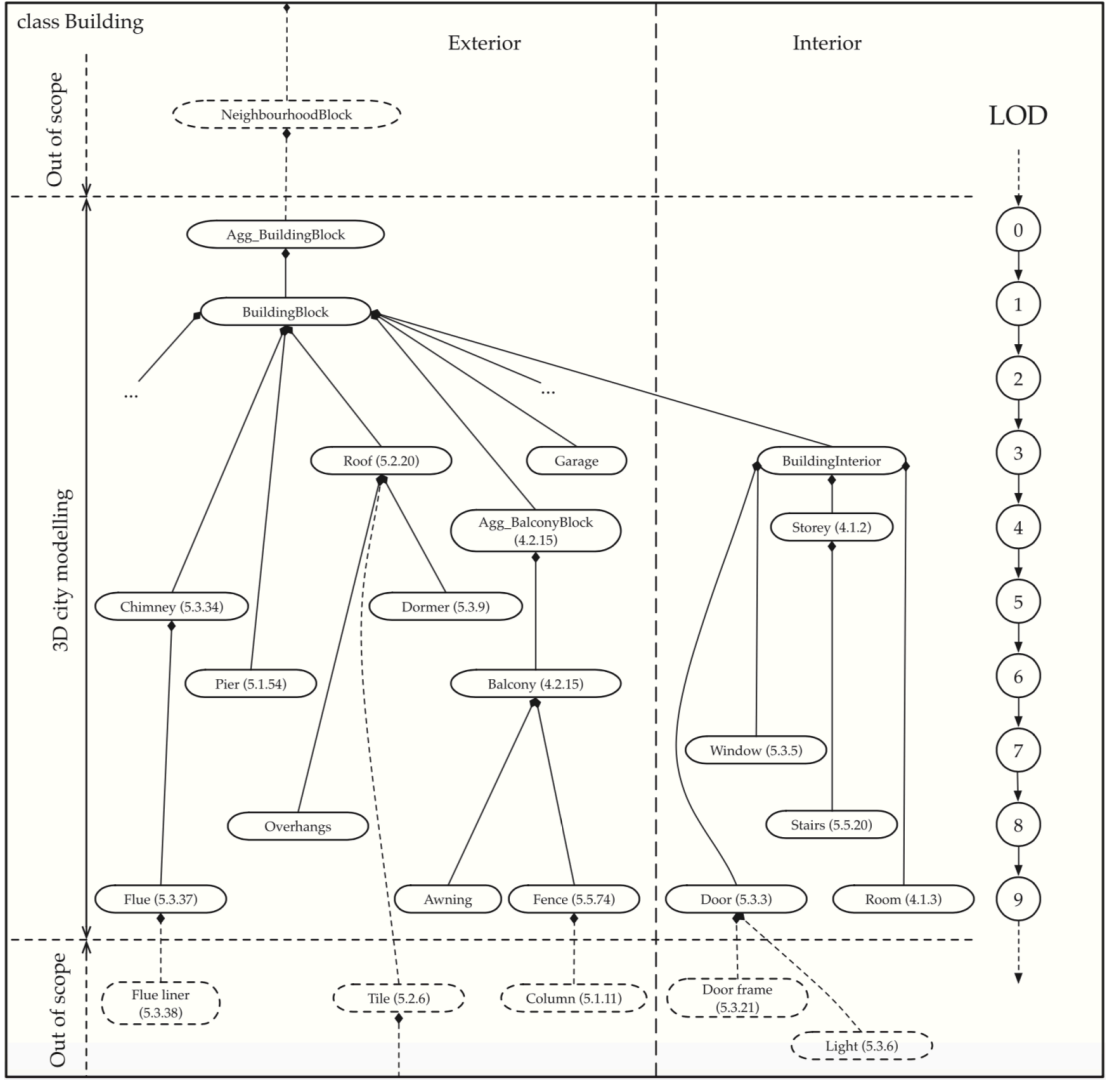
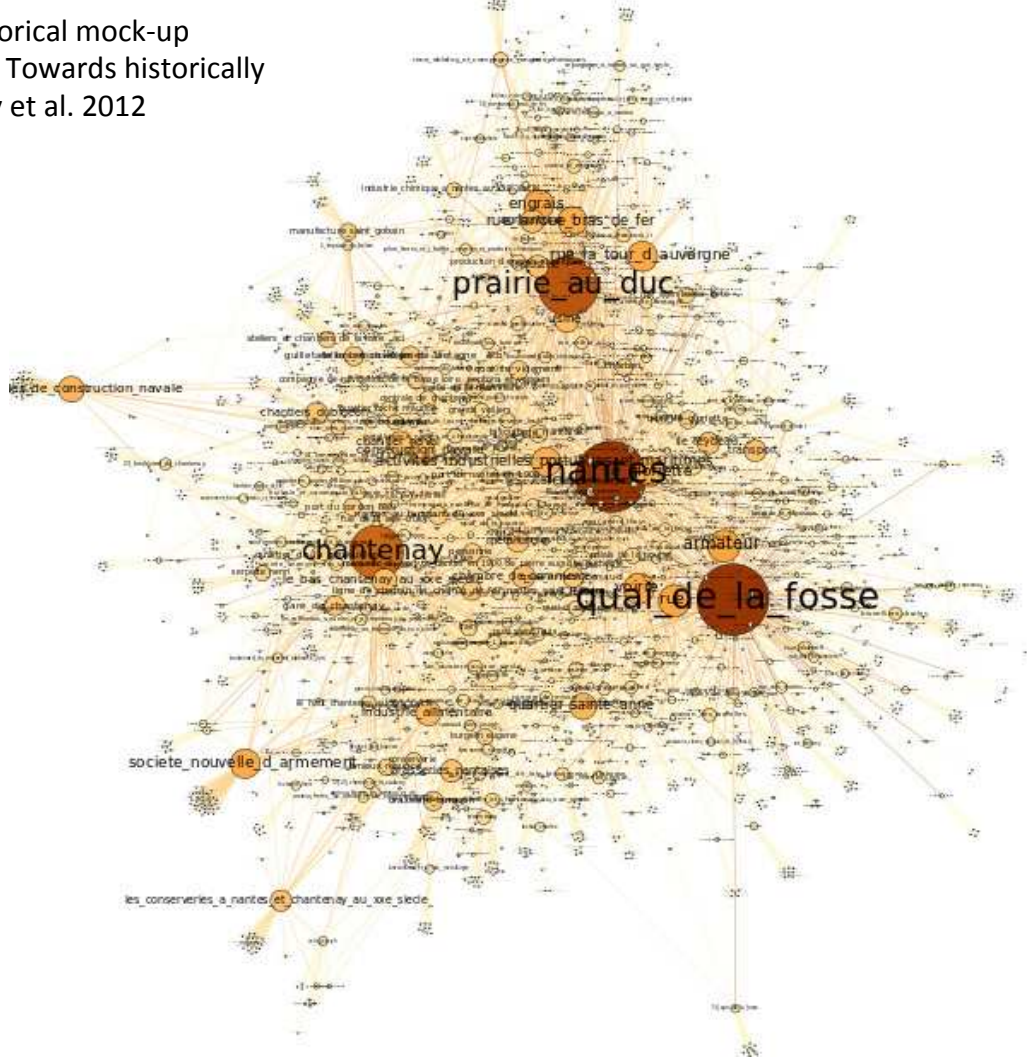


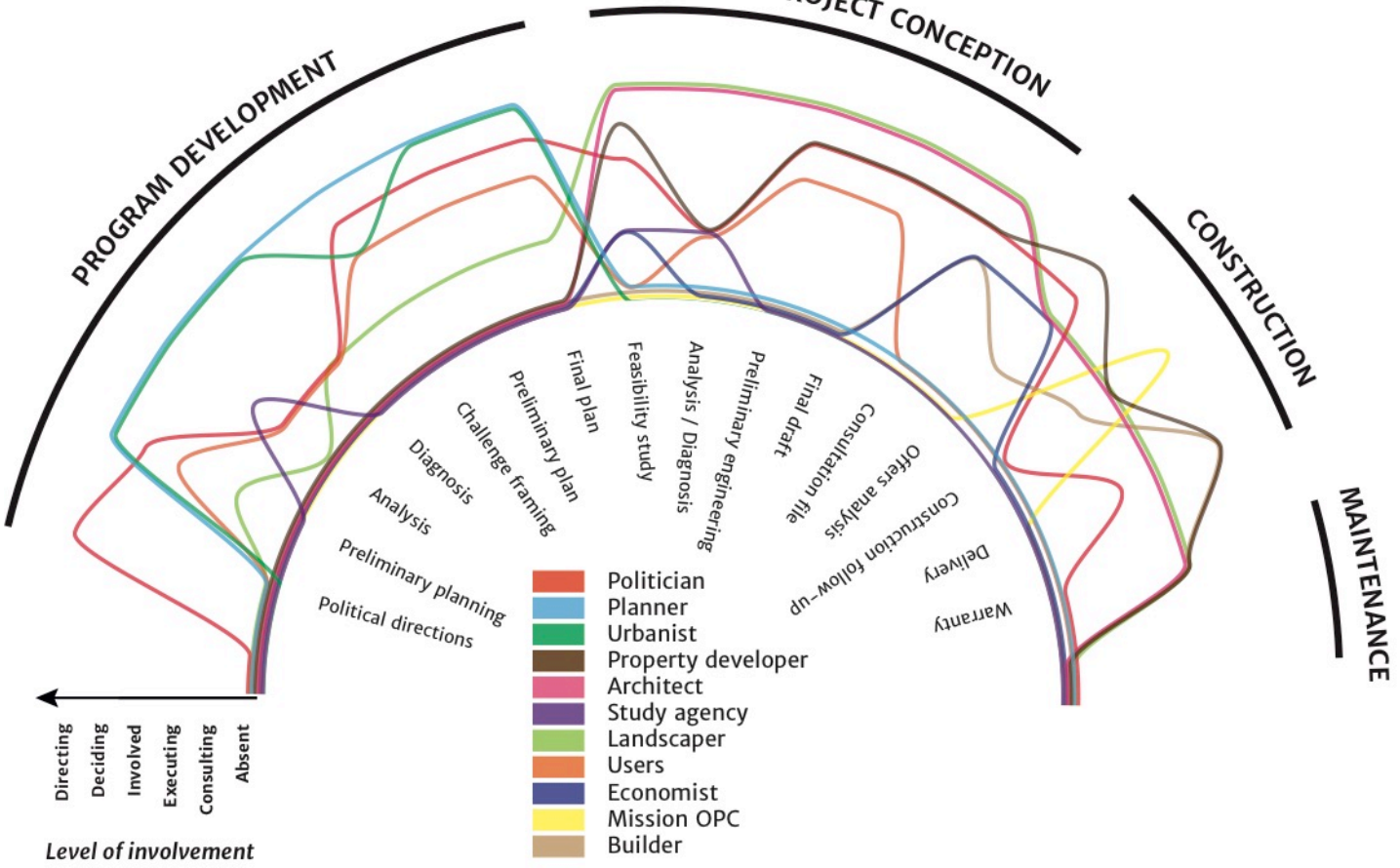
A generalized approach for historical mock-up acquisition and data modelling, Towards historically enriched 3D city models , Hervy et al. 2012



designing the city


EnVIE project , A framework to produce urban data at large scale, Tourre et al. 2012
44%
50%
80%
36%
44%
≤ 50 A
51 à 90 B
91 à 150 C
151 à 230 D
231 à 330 E
331 à 450 F
≥ 451 G
ID cadastre : 350278 AP014
Surface au sol : 123.052250
Nombre d'etages : 1
Classe energetique : G
Adresse :
Fonction : habitation

Virtually Physical Presentation of Data Layers for Spatiotemporal Urban Data Visualization, Spur et al., 2017



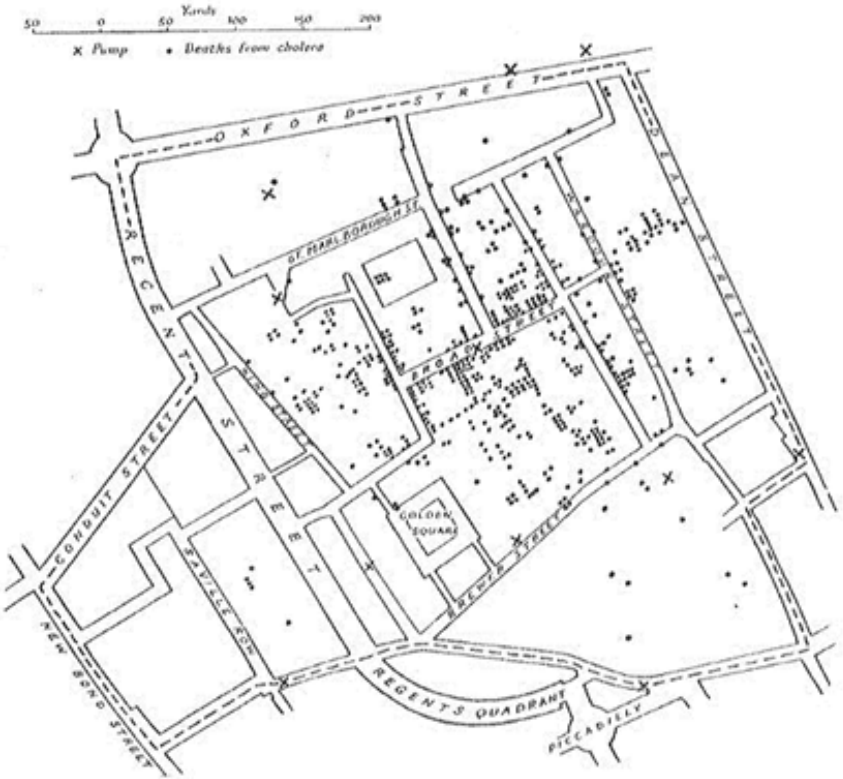
Nantes

Nantes

seeing the city

Sienne au moyen age,
Grand prix de Rome,
Hourlier, 1923

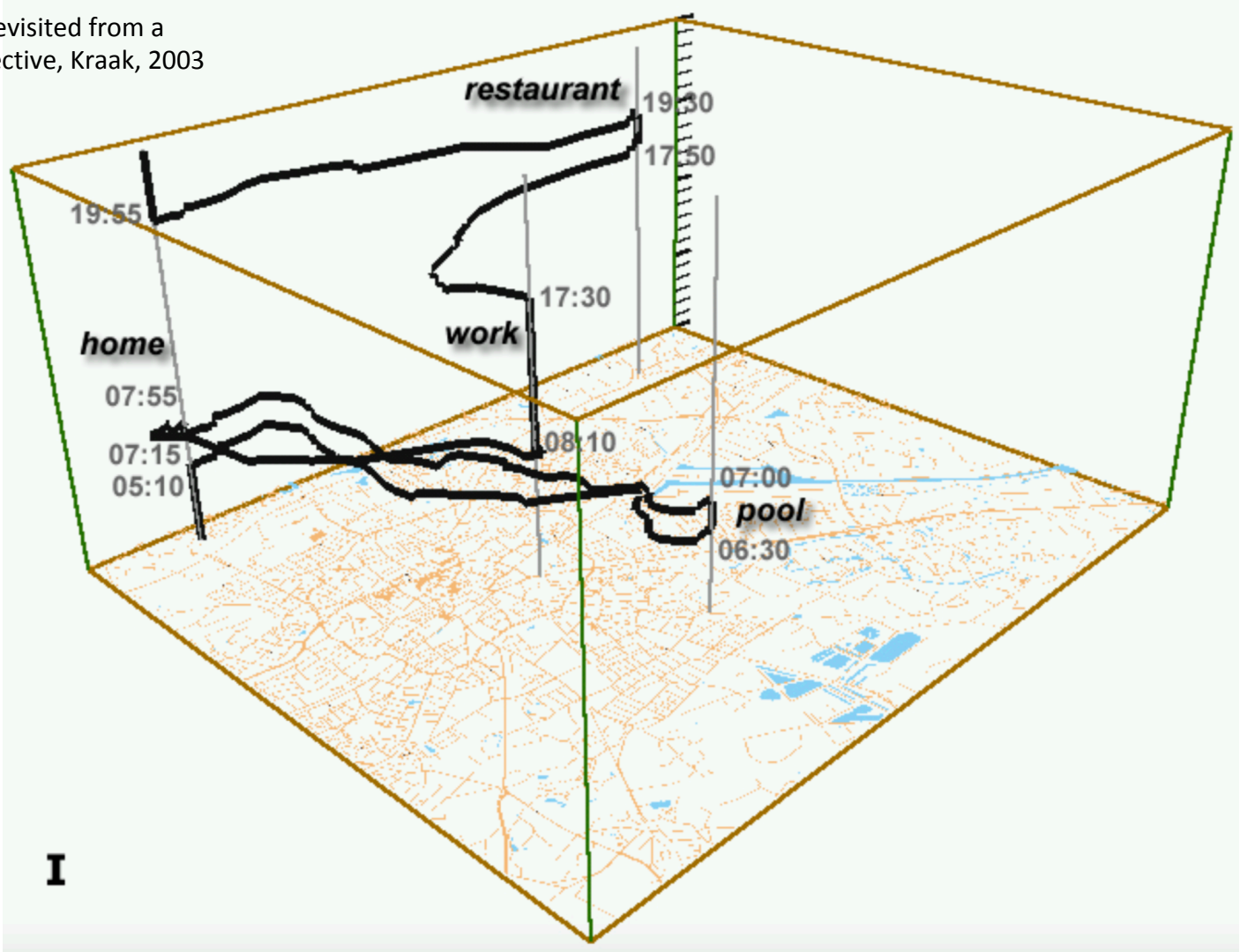
1854 Broad Street cholera outbreak, Snow, 1854



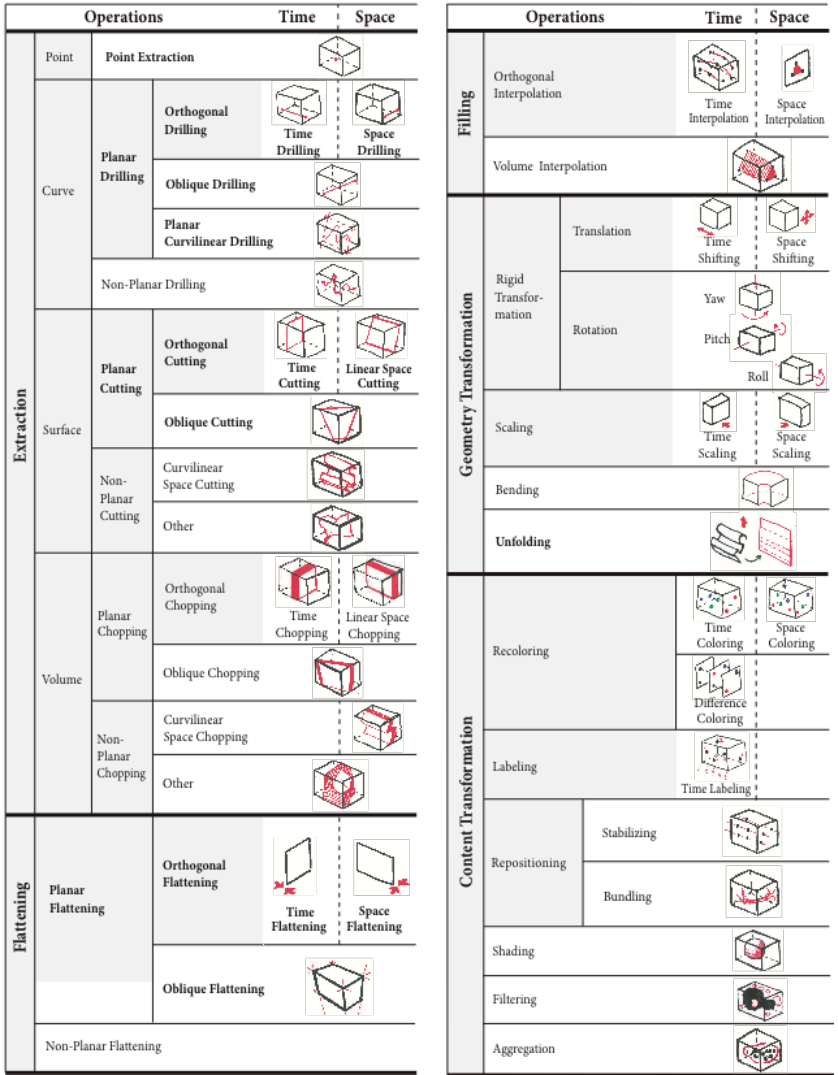

Caractérisation et
restitution vidéographiqu
des ambiances urbaines,
Giraldo et al. 2018


Caractérisation et
restitution vidéographique
des ambiances urbaines,
Giraldo et al. 2018

The space-time cube revisited from a geovisualization perspective, Kraak, 2003



A Descriptive Framework for Temporal Data Visualizations Based on Generalized Space-Time Cubes, Bach et al. 2016



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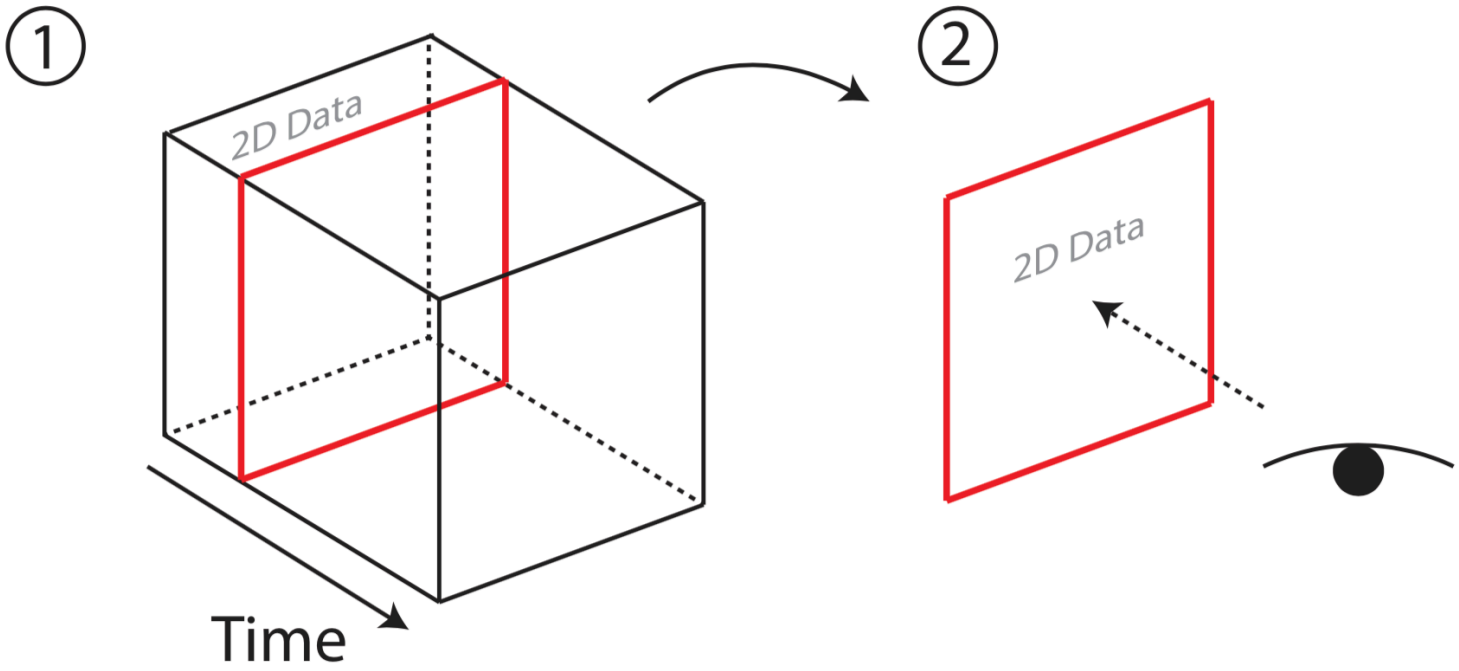

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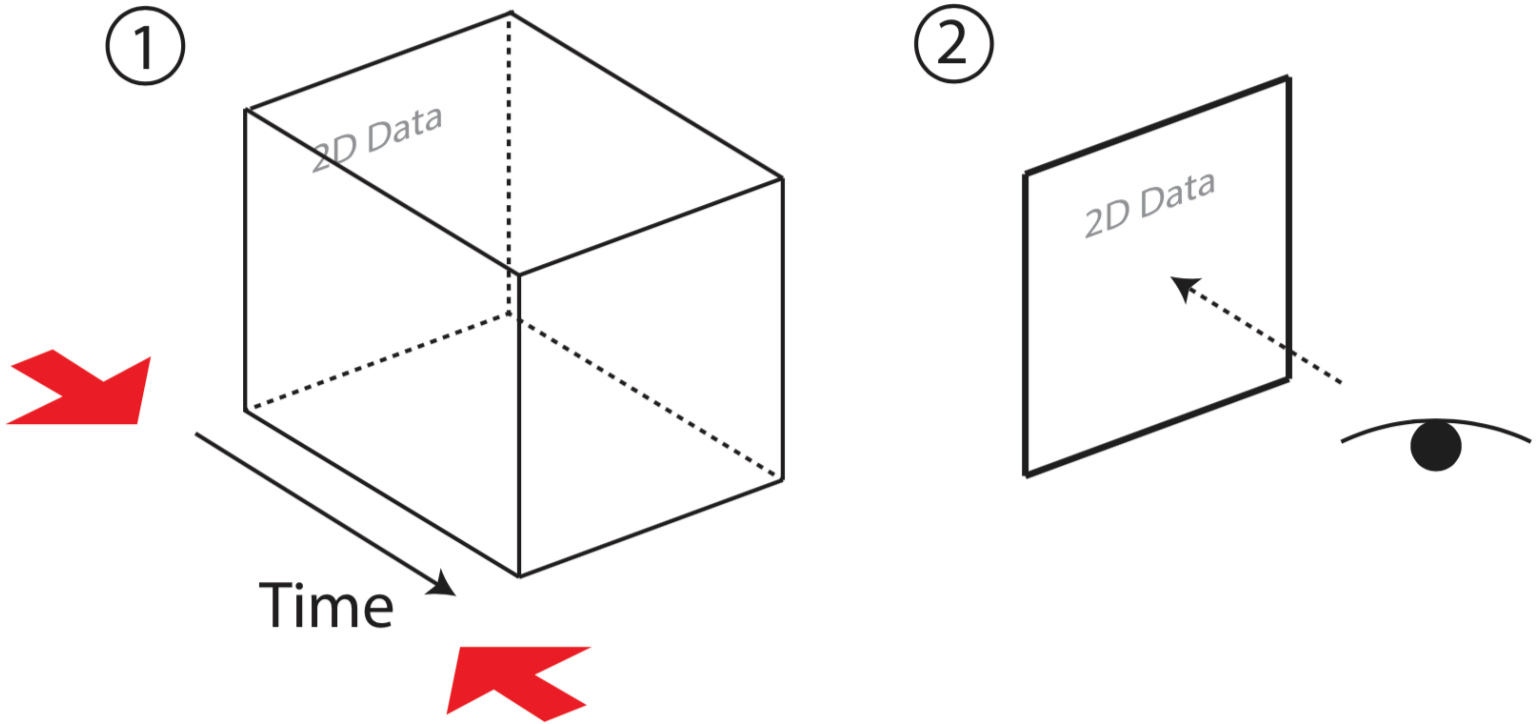
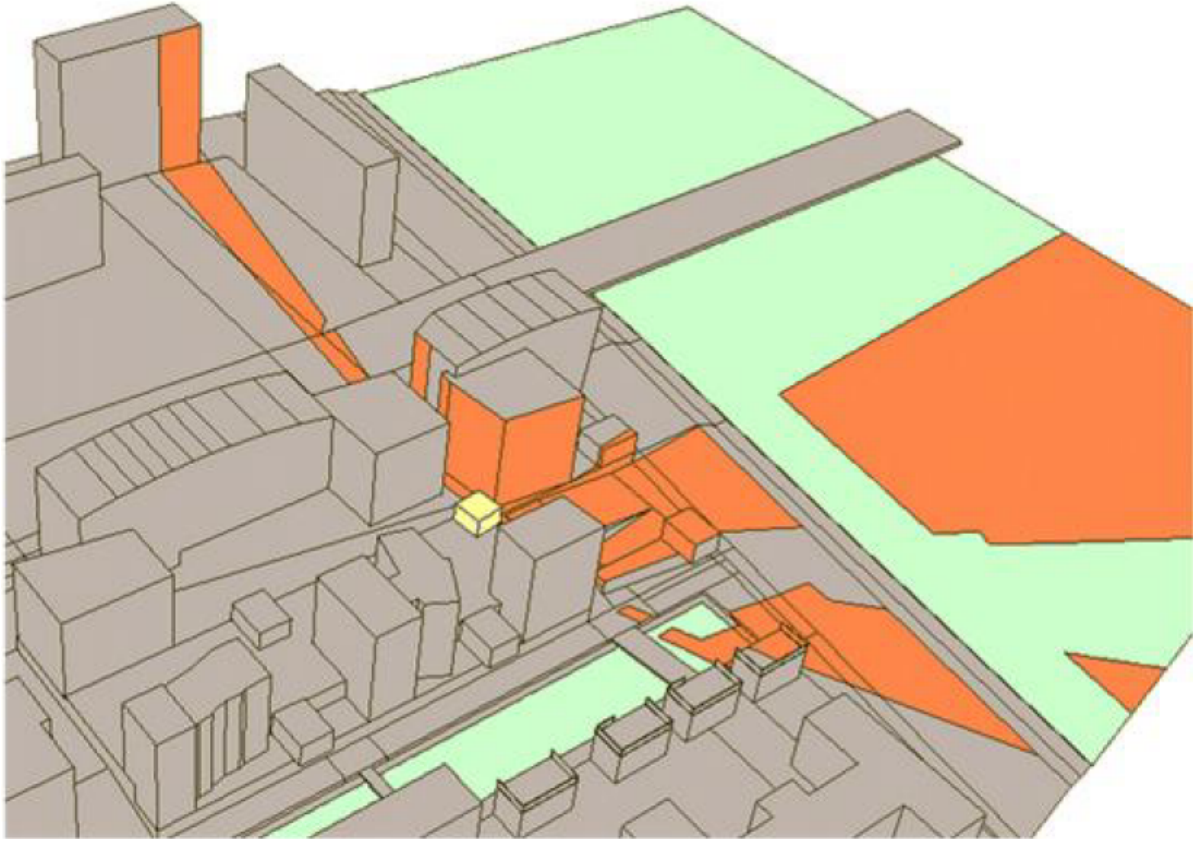
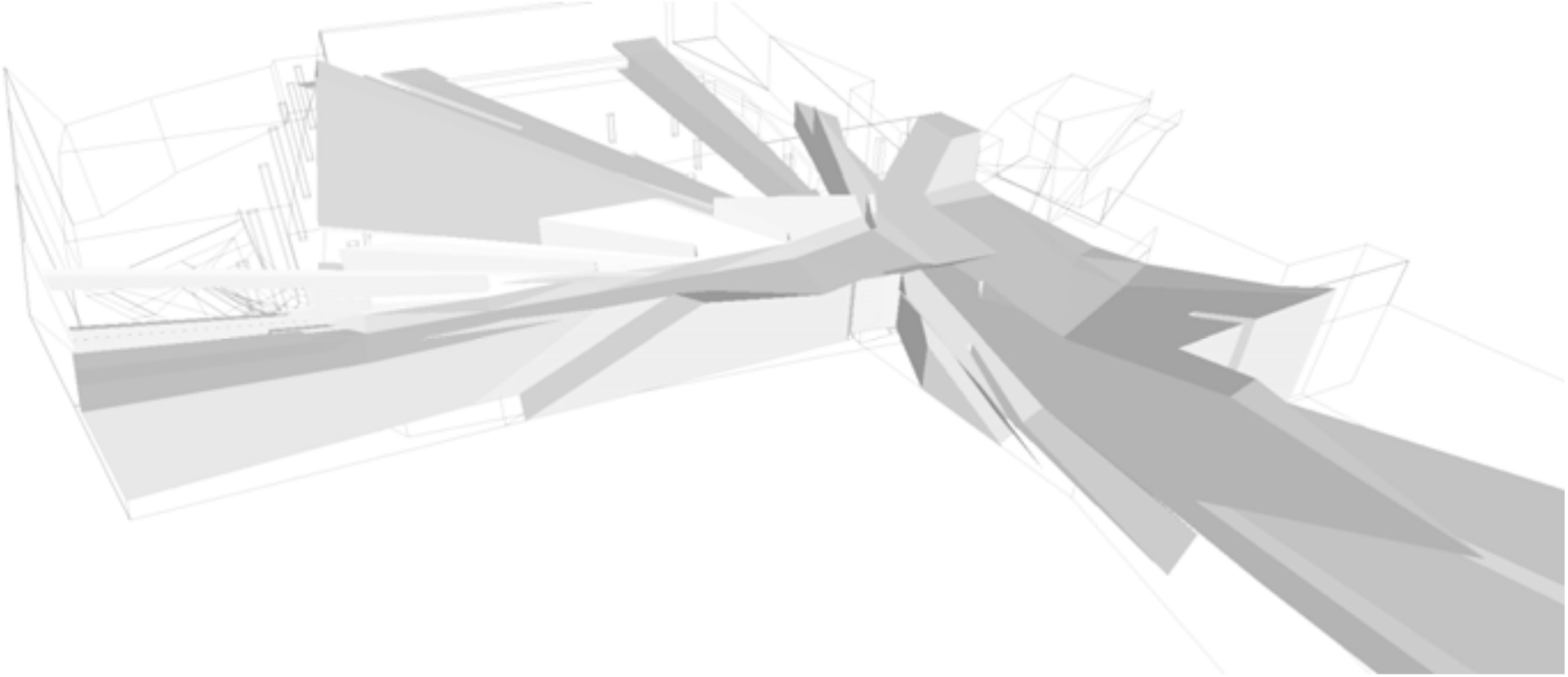
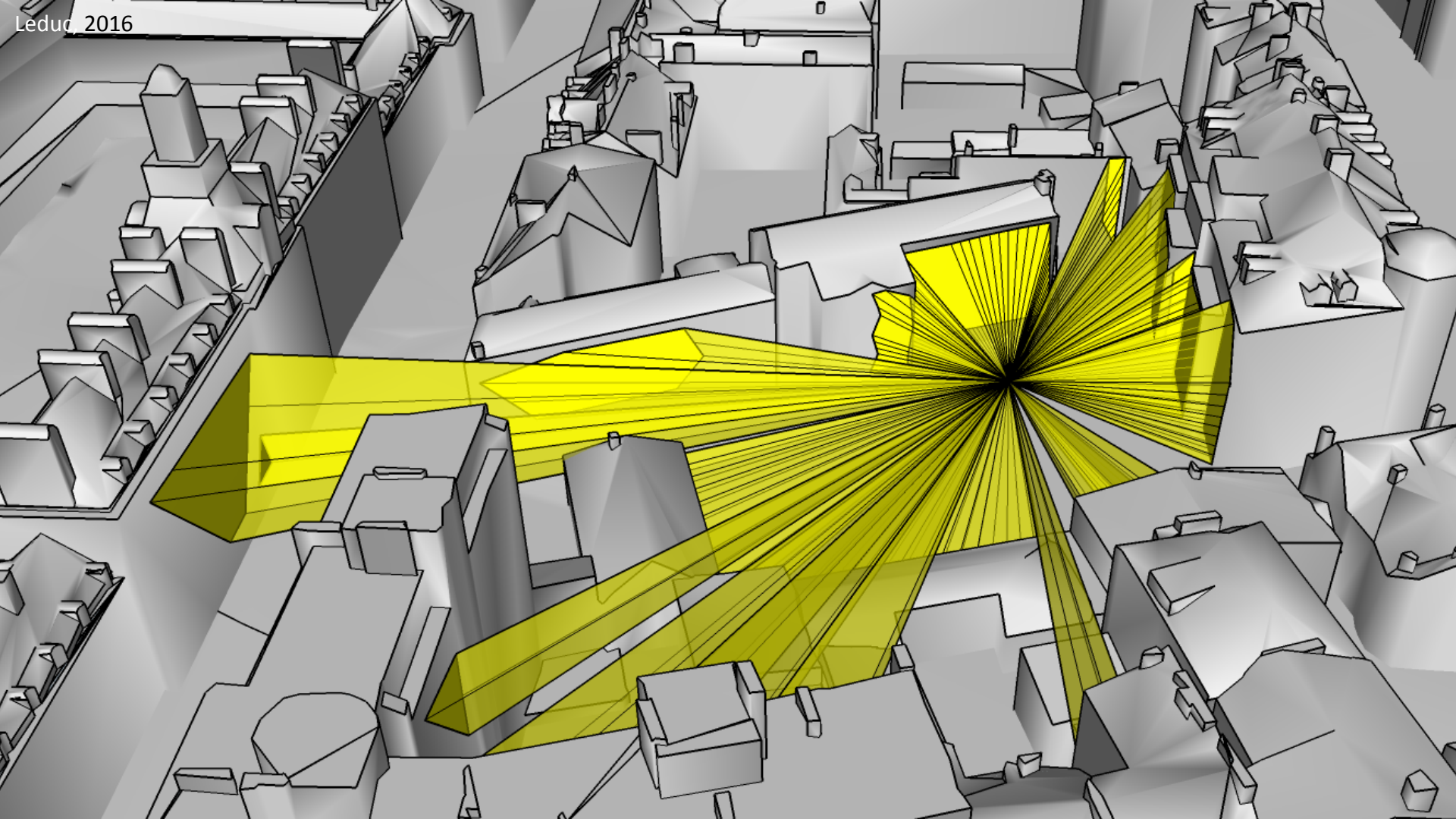


Miguet, 2010

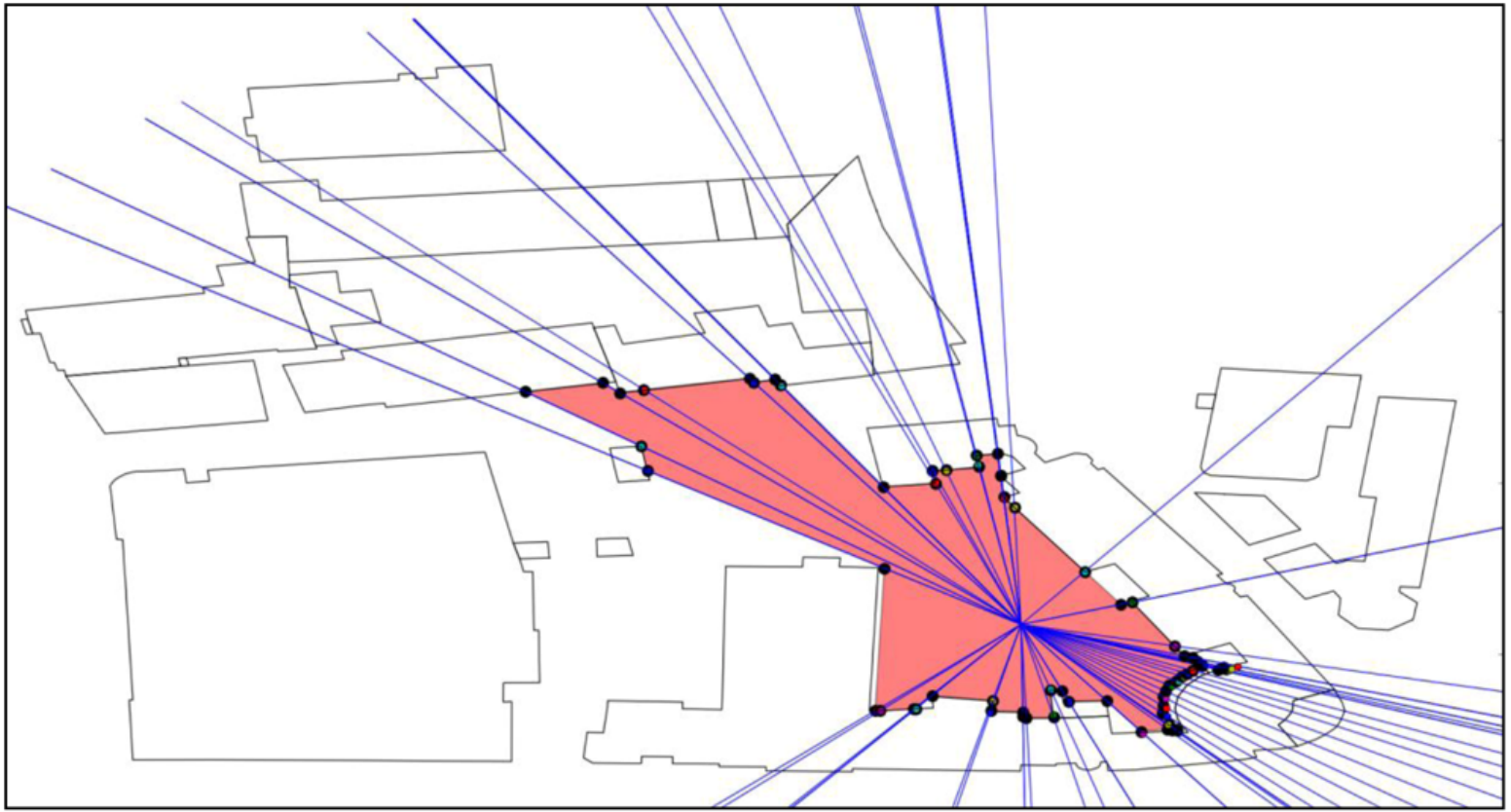


World Trade Centre Memorial Museum:
Computational Analysis & Development
Report, Derix et al. 2007

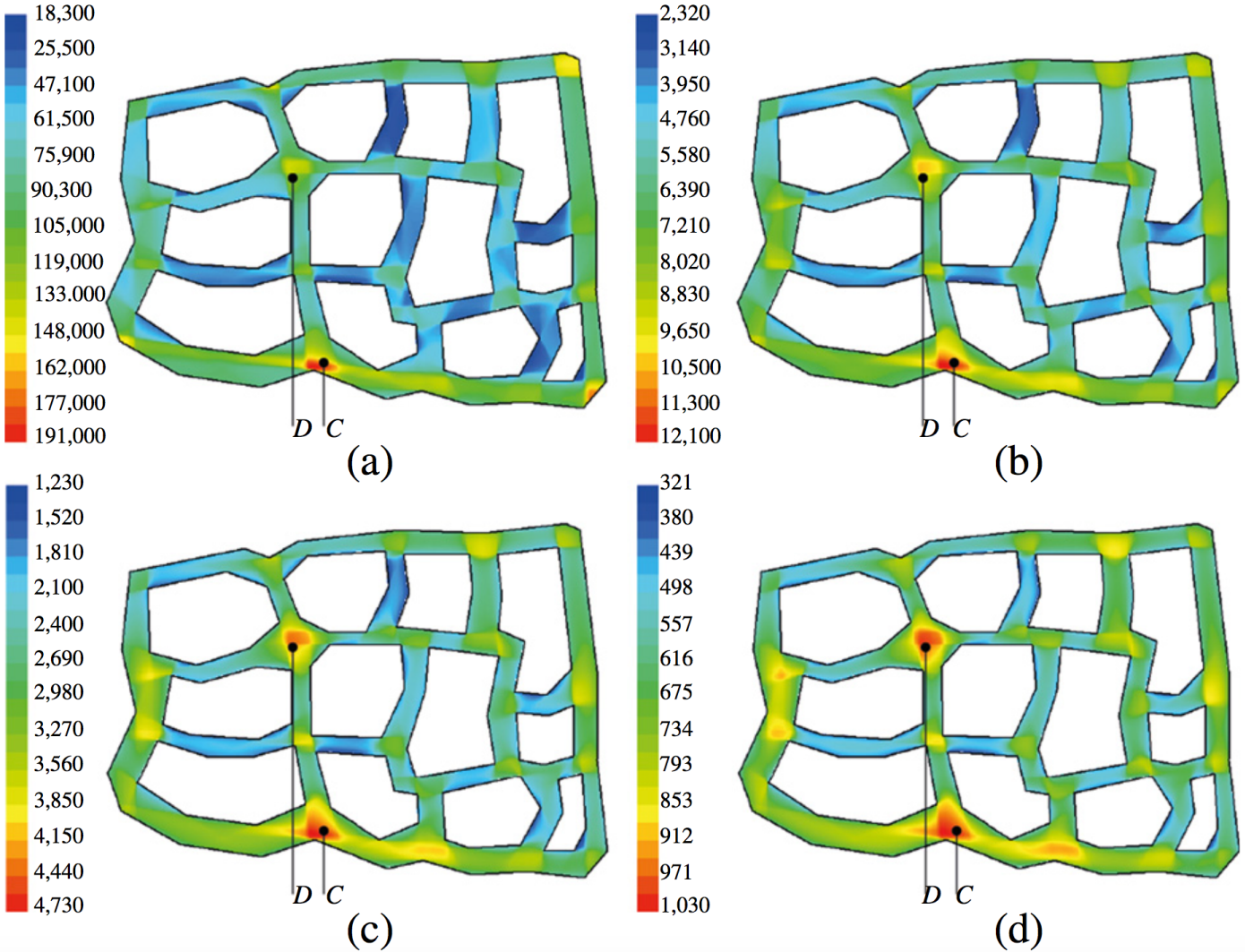


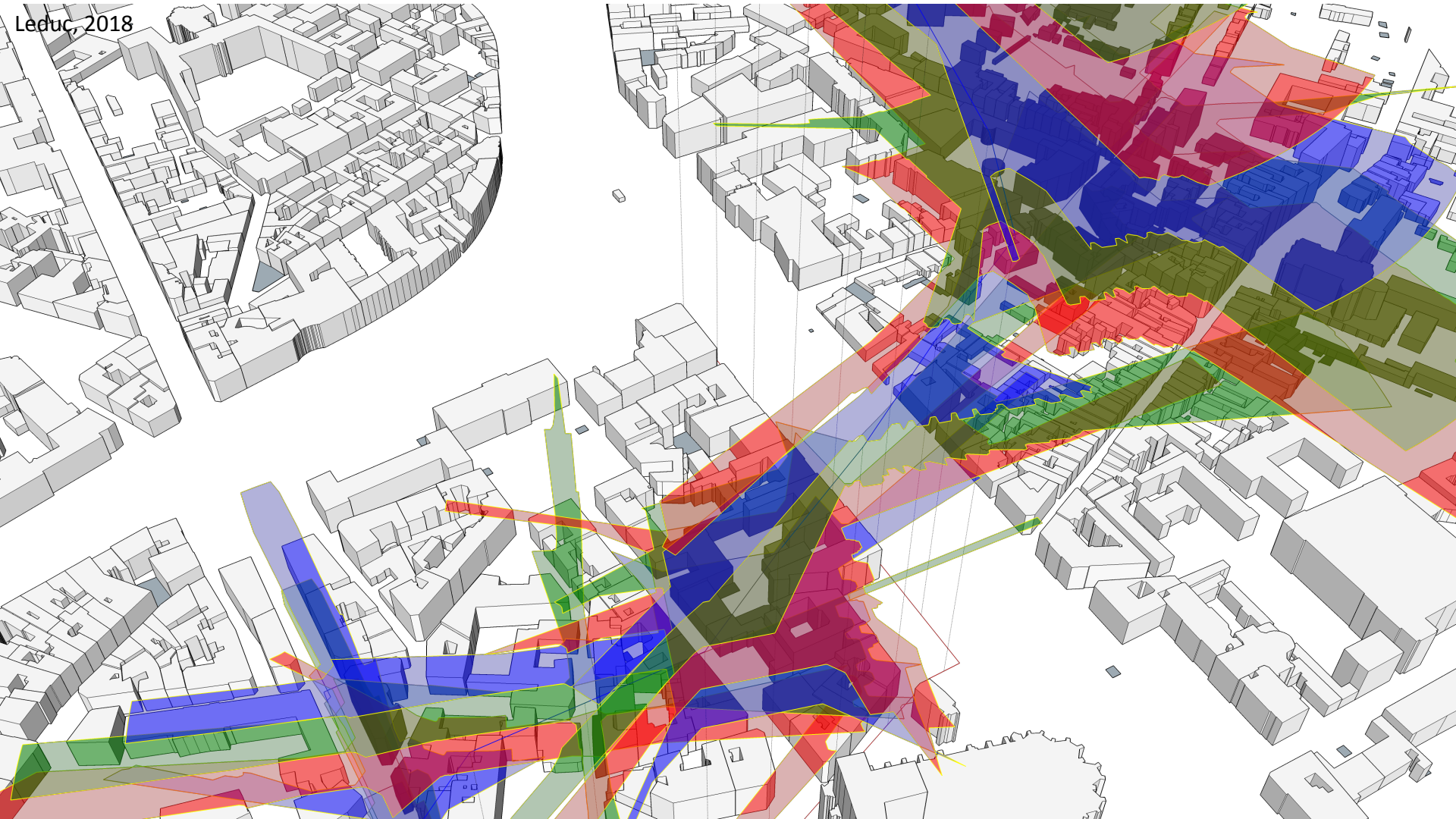

Leduc 2016

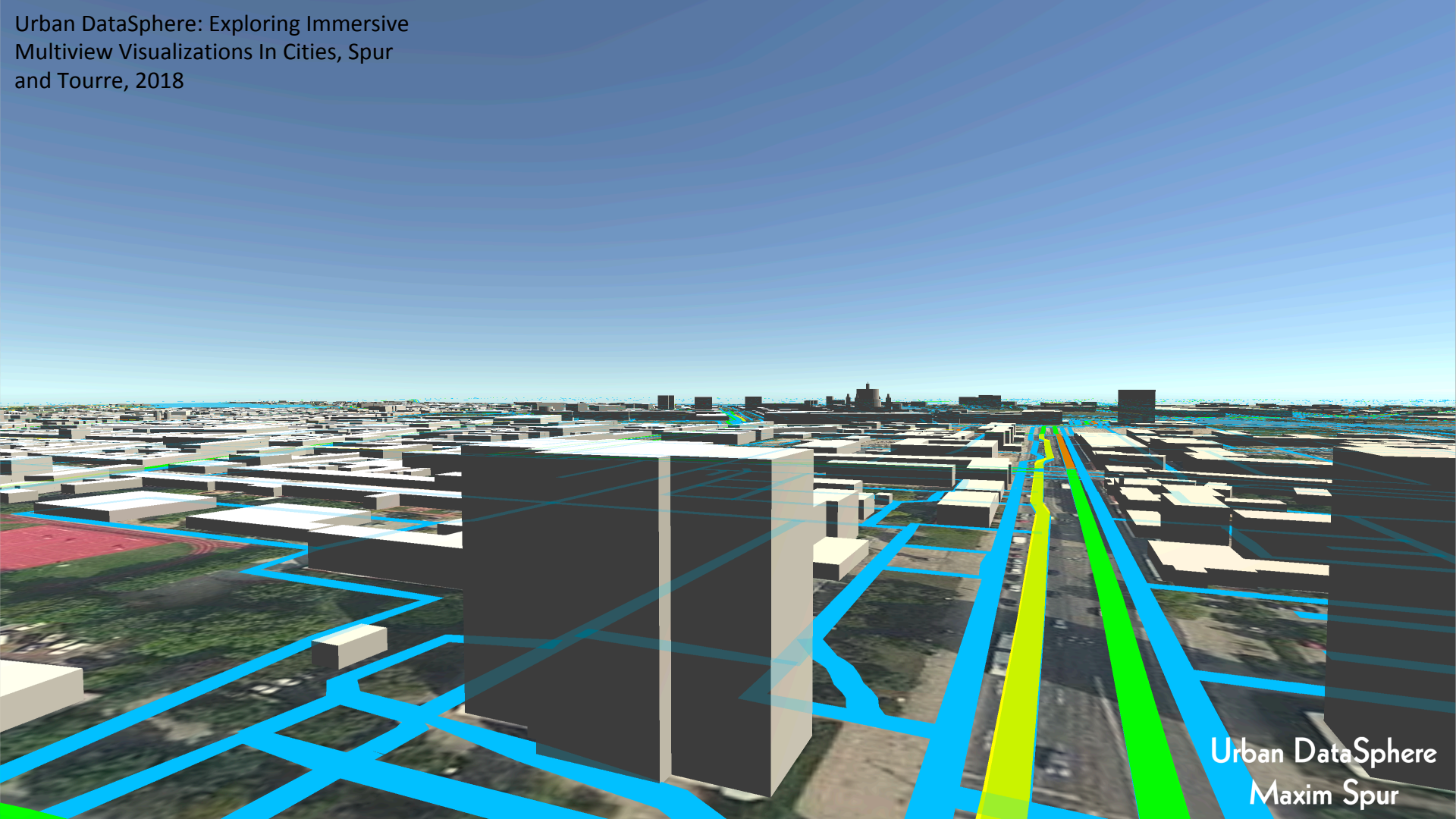
Leduc, 2014

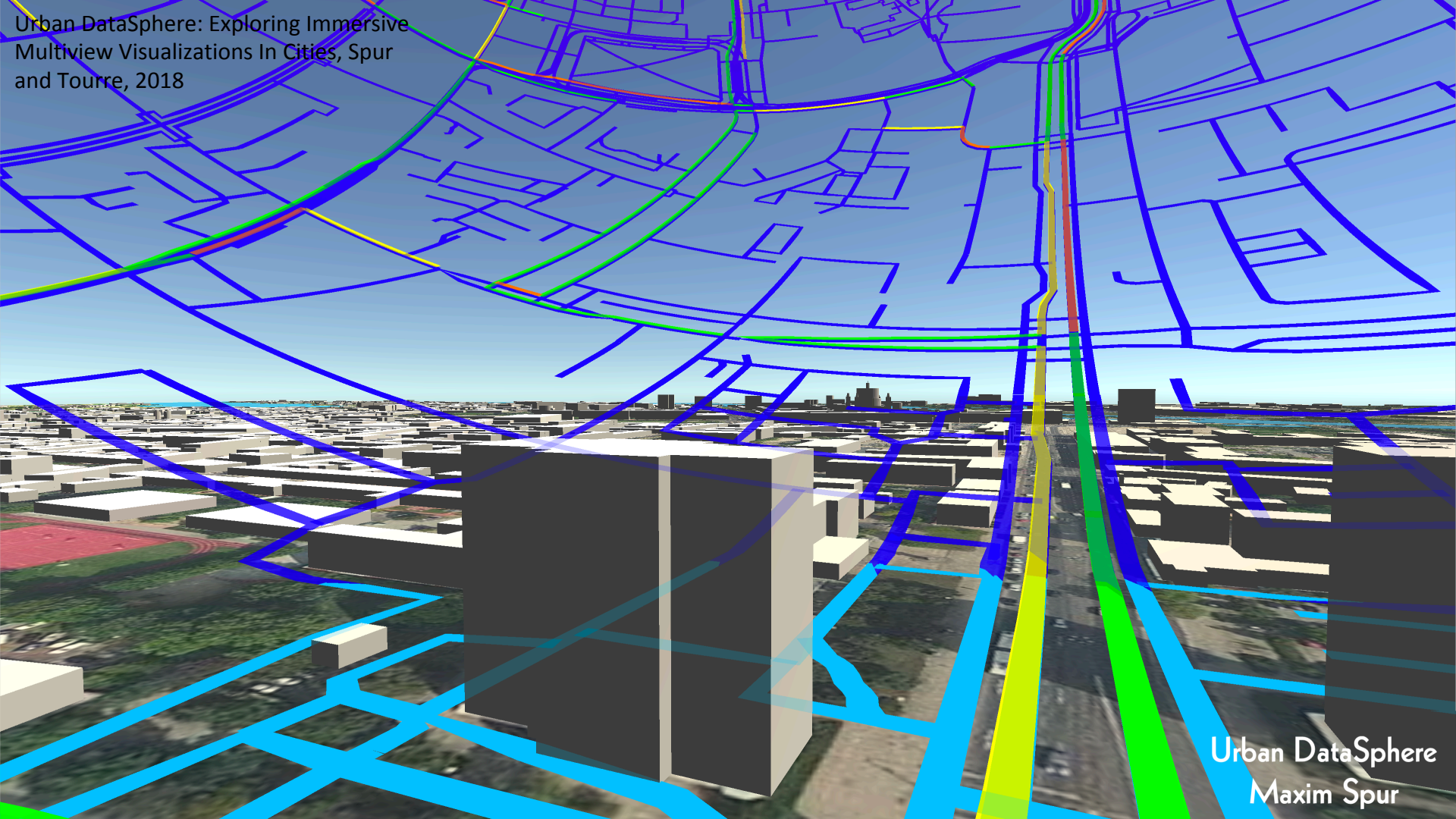


Distance-weighted isovist area: An isovist index representing spatial proximity, Kim and Jung, 2014




Leduc, 2018


Urban DataSphere: Exploring Immersive Multiview Visualizations In Cities, Spur and Tourre, 2018
Urban DataSphere
Maxim Spur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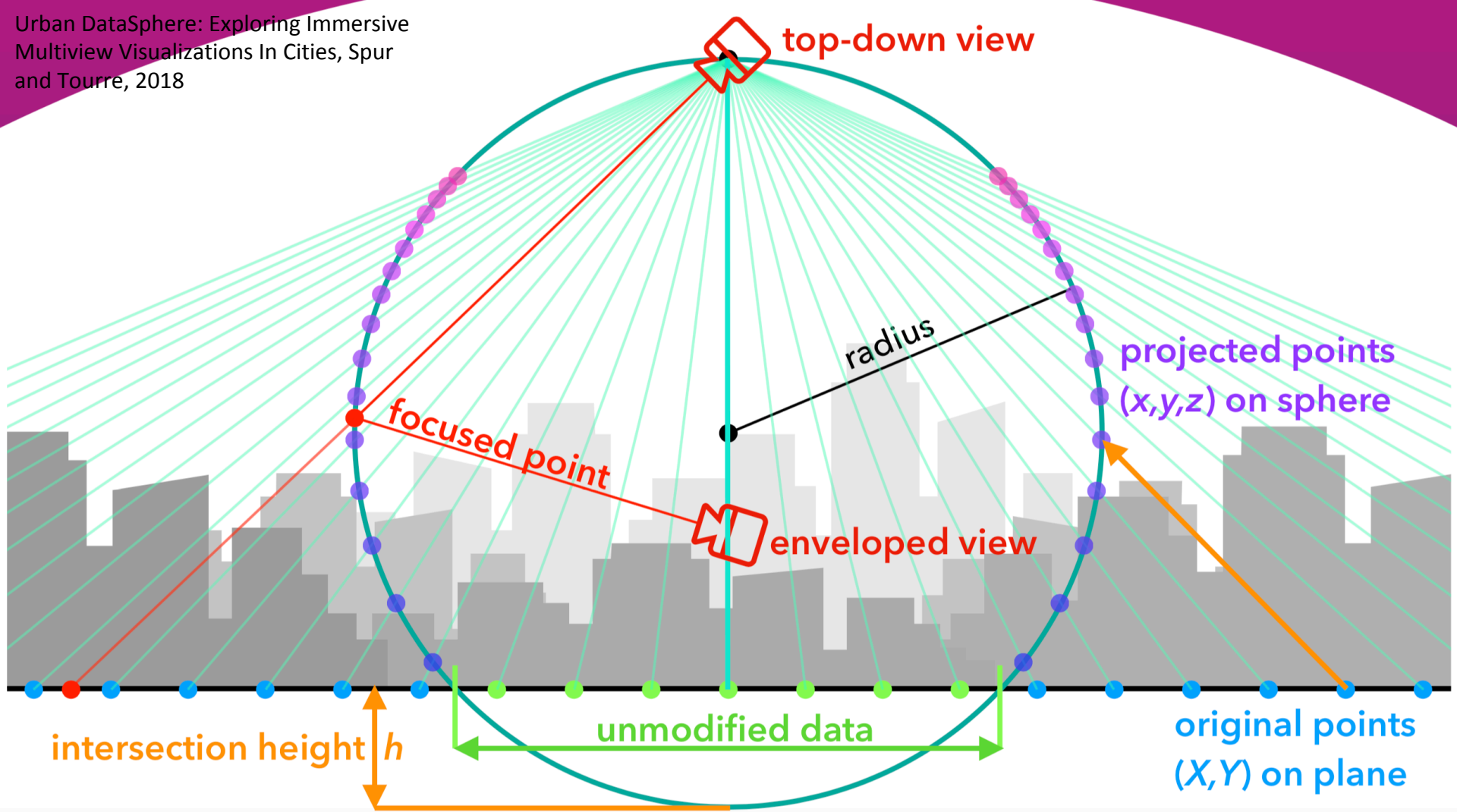

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