

# An Applied Knowledge Framework to Study Complex Systems

J. Raimbault<sup>1,2</sup>

`juste.raimbault@parisgeo.cnrs.fr`

<sup>1</sup>UMR CNRS 8504 Géographie-cités

<sup>2</sup>UMR-T IFSTTAR 9403 LVMT

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# Knowledge of the Knowledge

*Source :*

# Processes of Knowledge Production

# Knowledge Frameworks

# Research objective

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# Approach and Methodology

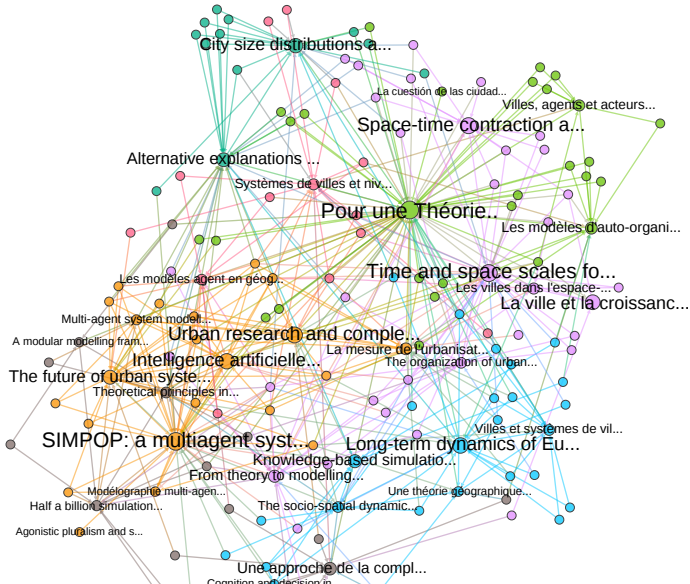
# Evolutionary Urban Theory

# Iterative Construction of Knowledge



# Existence of Knowledge Domains ?

# Unveiling Endogenous causality regimes



# Engineering the Metropolitan

**Table:** Illustration of Knowledge Framework Application

Engineering Issue	Knowledge Domains	Transferability
Autonomous Transportation	Empirical, Modeling	Integrated Modeling
Innovative Modeling	Modeling, Methods	Method development
Functional Requirements	Empirical, Tools	Ergonomic tools
Societal Adaptation	Theoretical, Empirical	Stakeholders involvement
Technical Requirements	Empirical, Modeling	Integrated Modeling

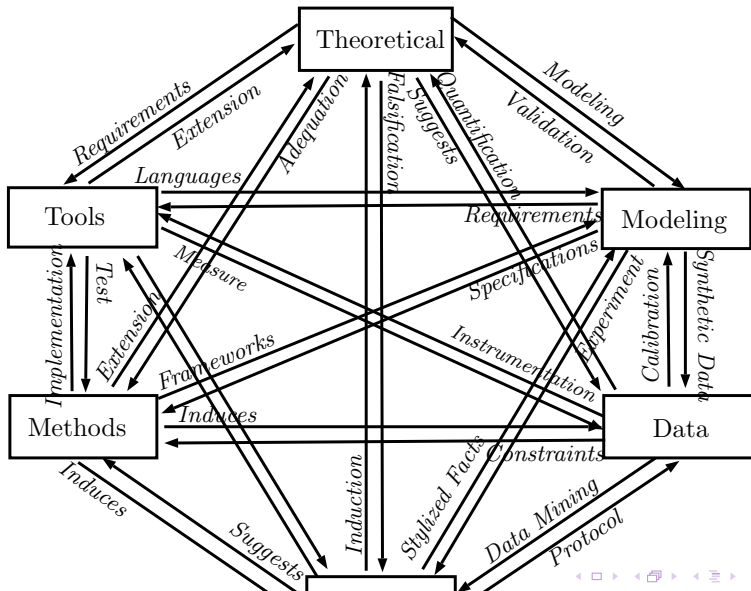
# Constraints on the Framework

# Epistemological Foundations

# Knowledge Domains

# Co-evolution of Knowledge

# Visualization





# Discussion

## Applications



## Developments



# Conclusion



- Code, data and results available at <https://github.com/JusteRaimbault/CityNetwork>
- Paper on arXiv at <https://arxiv.org/abs/1706.09244>
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# Reserve slides

## Reserve Slides

# Function of Models

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