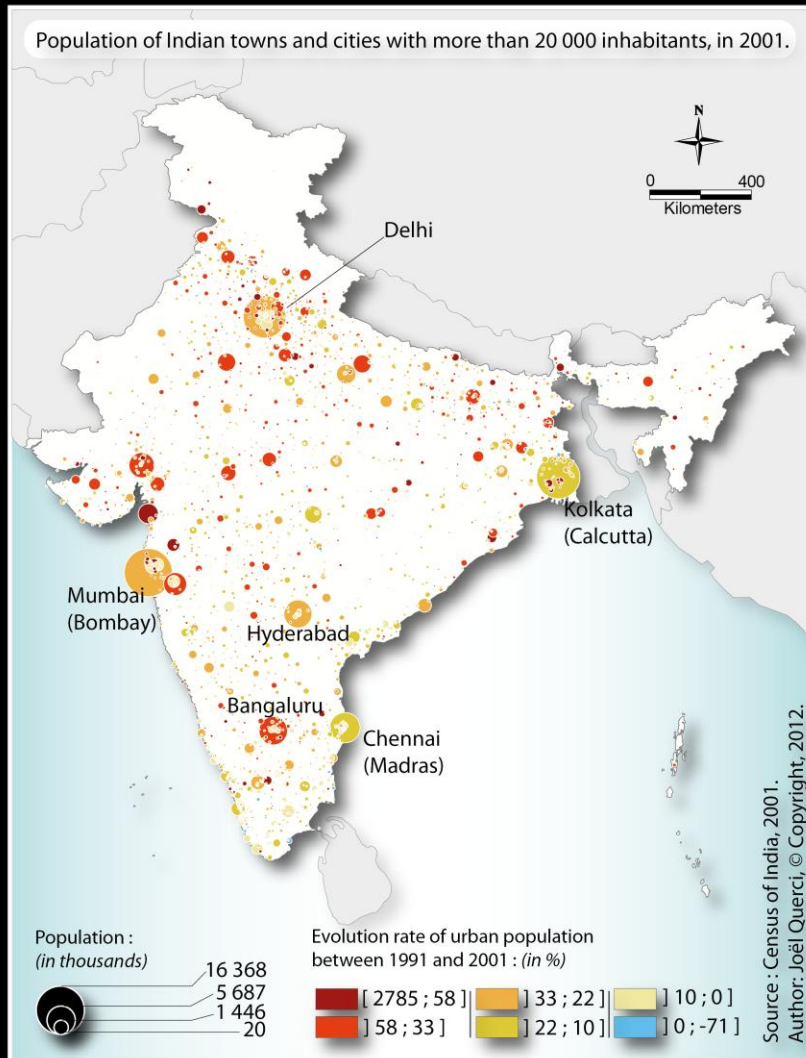


EVOLUTION AND SYSTEMIC PROCESSES OF THE INDIAN URBAN SYSTEM

Joël Querci, 2013.



* Introduction

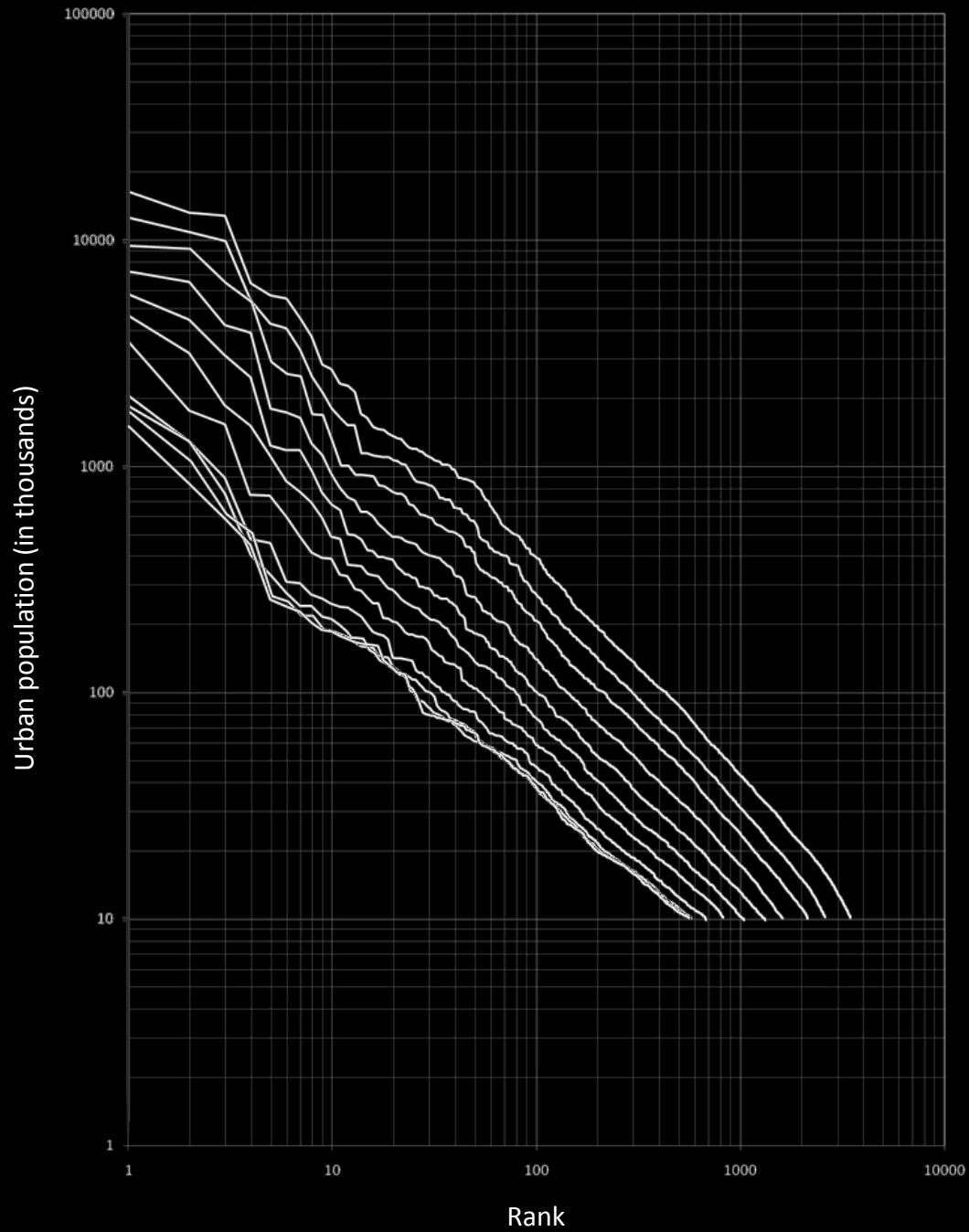


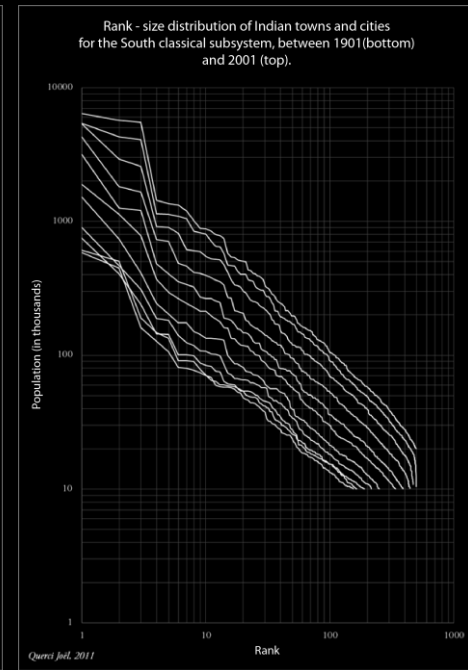
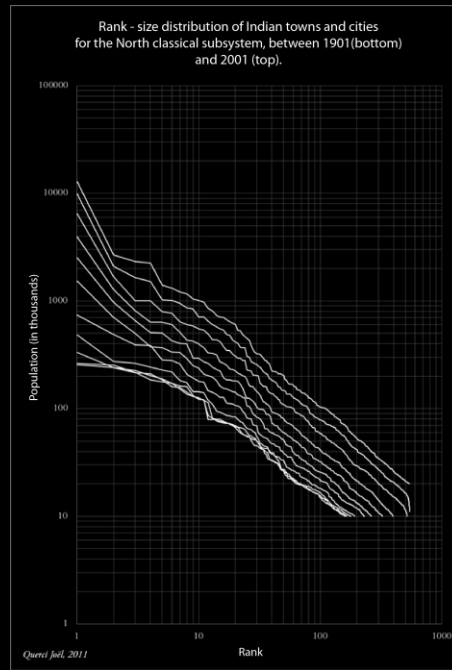
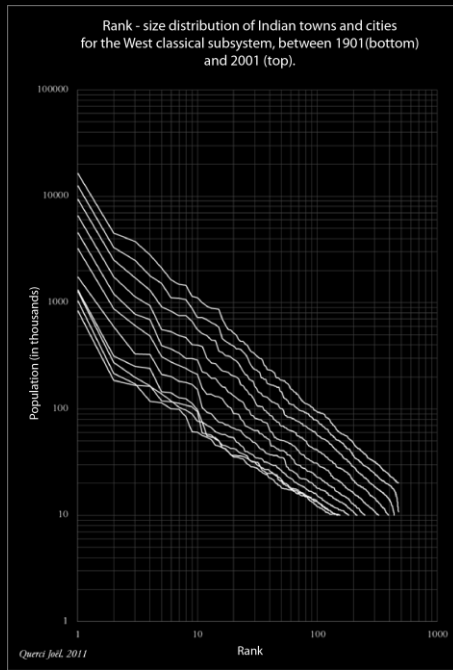
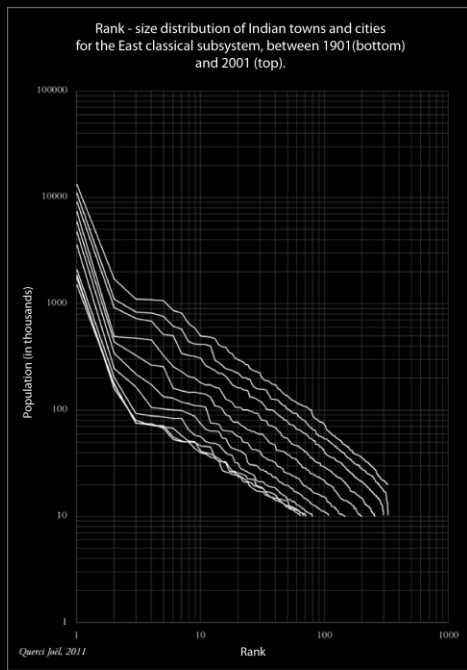
An urbanization rate of 31.2% in 2011 (USA : 84%) representing more than 377 millions of urbans.

A British colonization resulting in the transformation of the urban framework :

- We moved from an urban development inside the country,
- To an urban development along the coasts.

The entry of India within the globalization phenomenon resulted in a modification of its urban logics.



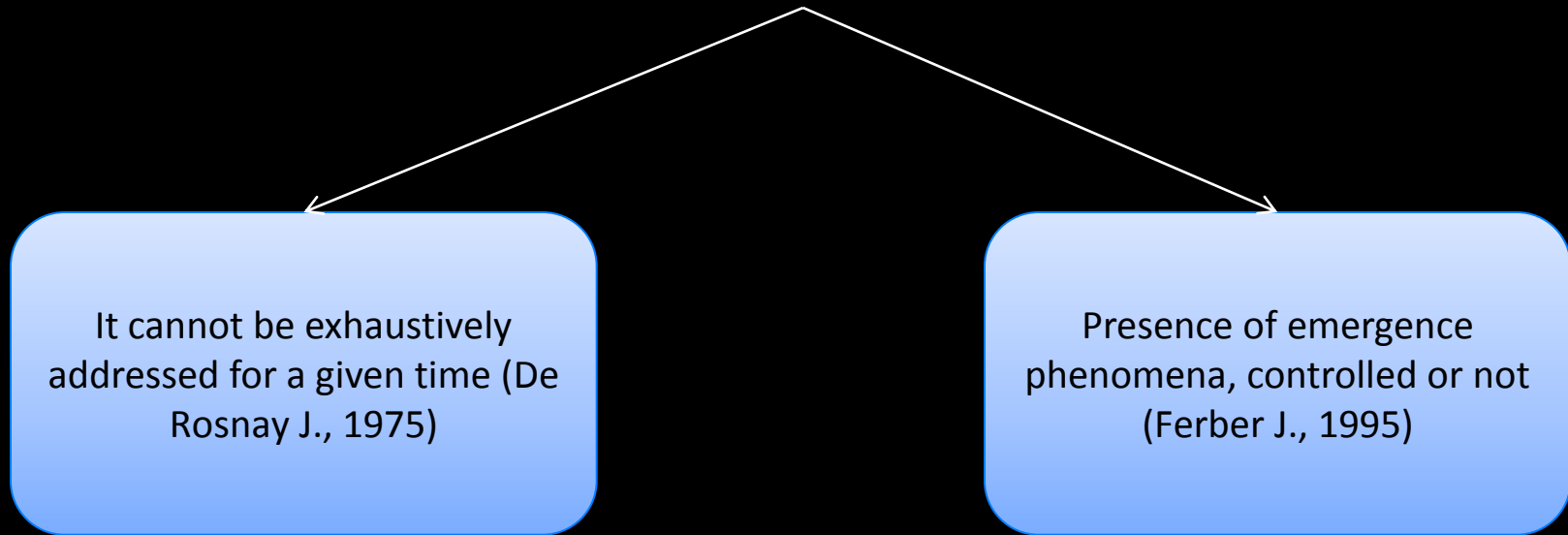


* Problematic

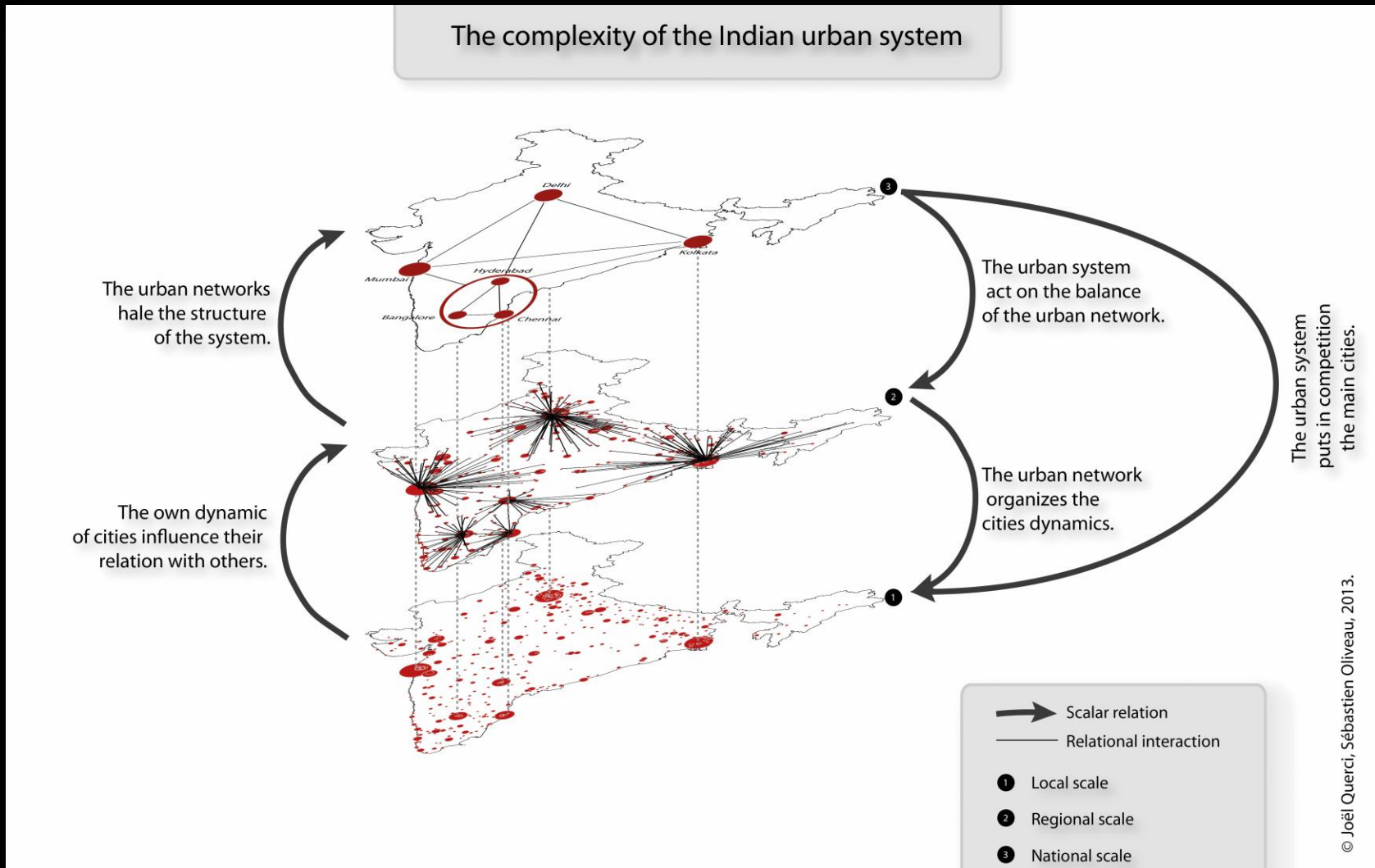
« Develop a more theoretical thinking on the nature of the Indian urban system, its organisation and the systemic processes that take place. »

* The complex nature of the Indian urban system:

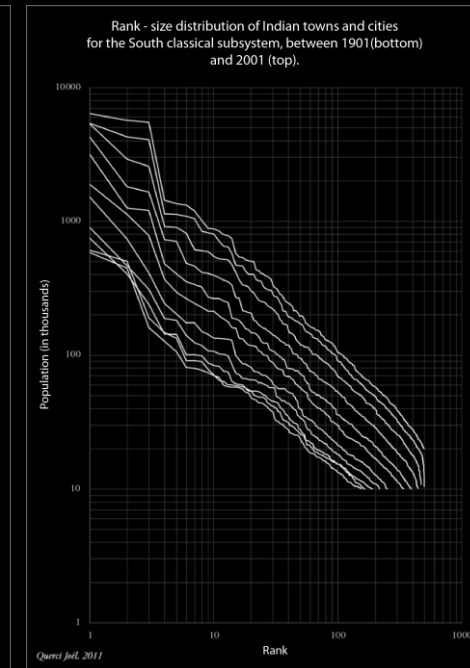
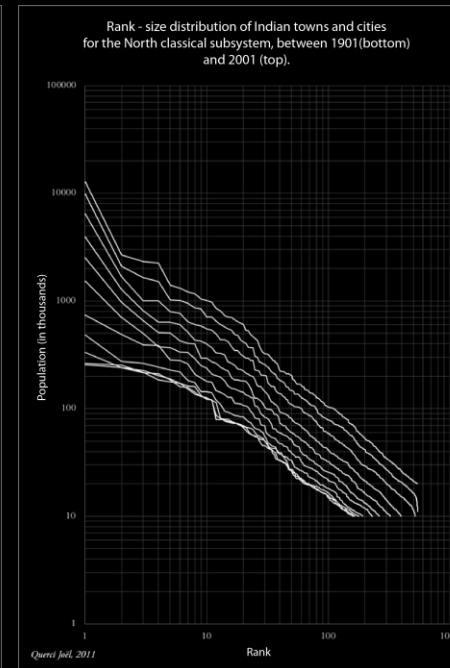
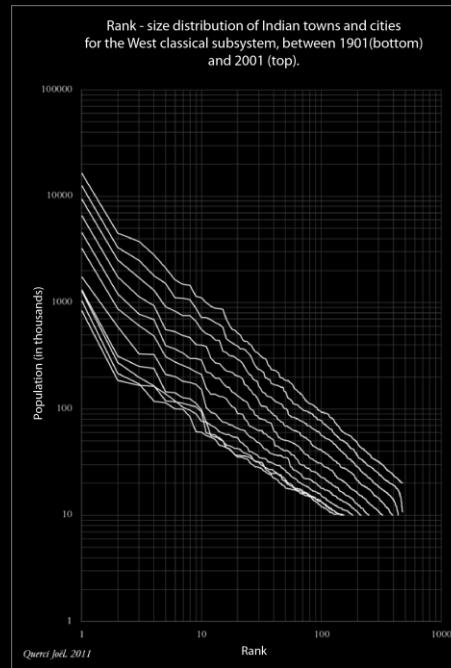
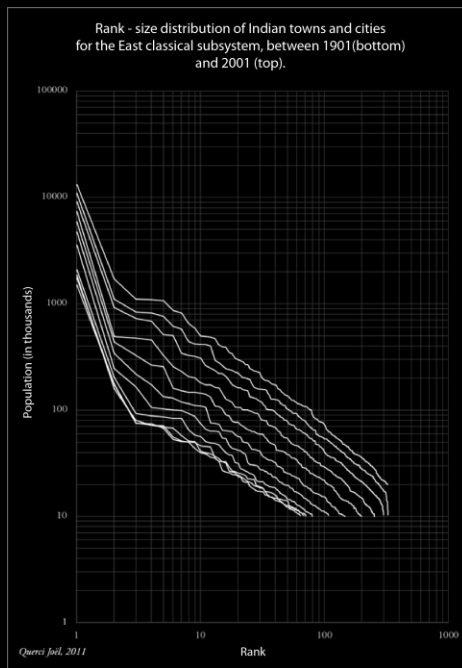
« A complex system could be defined as a system made up of a lot of elements in interaction, the multiplicity of those interactions reporting the complexity of the system.» (Zwirn H., 2006).



* The complex organisation of the Indian urban system:



* The complex organisation of the Indian urban system:



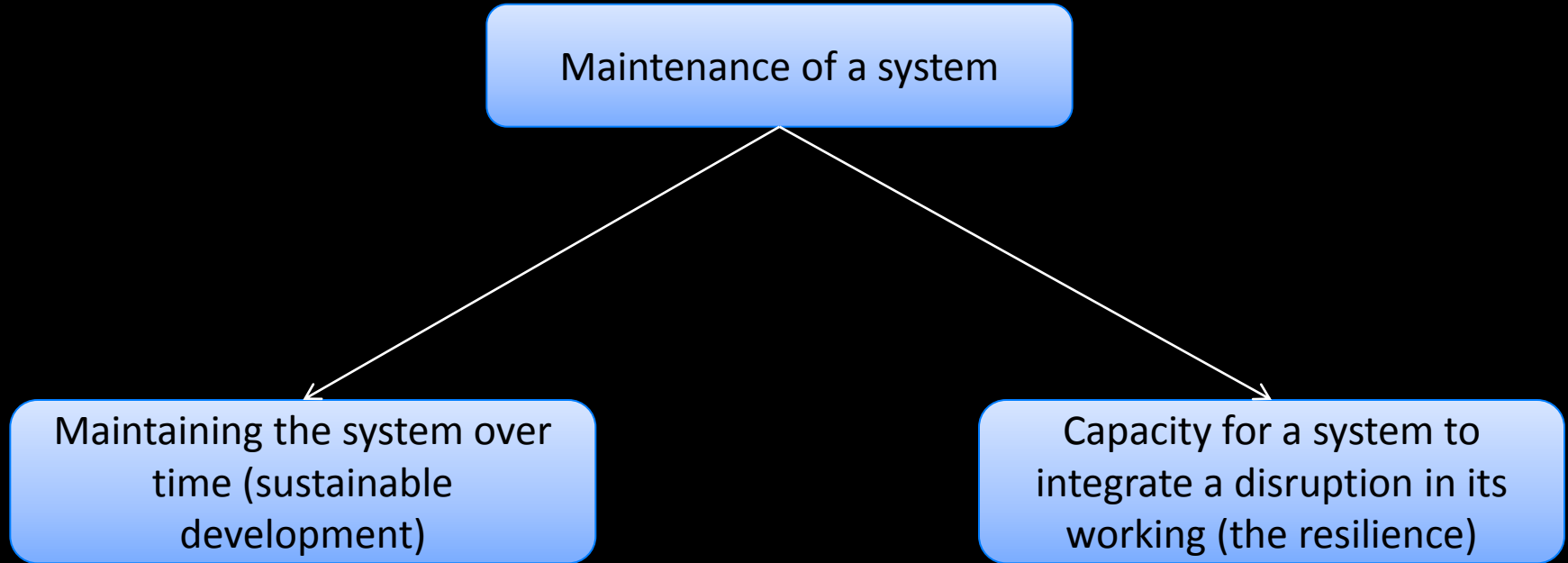
* The resilience of the Indian urban system:

«Resilience corresponds to the capacity of a system to integrate a shock in its working without change its qualitative structure» (Holling , 1973).

In ecology, resilience measures the return time required to a system to return to the stability.

The resilience corresponds to the capacity of a shocked urban system to recover its structural balance state. This structural balance corresponds to the return to a regular urban framework.

* The resilience of the Indian urban system:



* The resilience of the Indian urban system:

Active complex system having several features

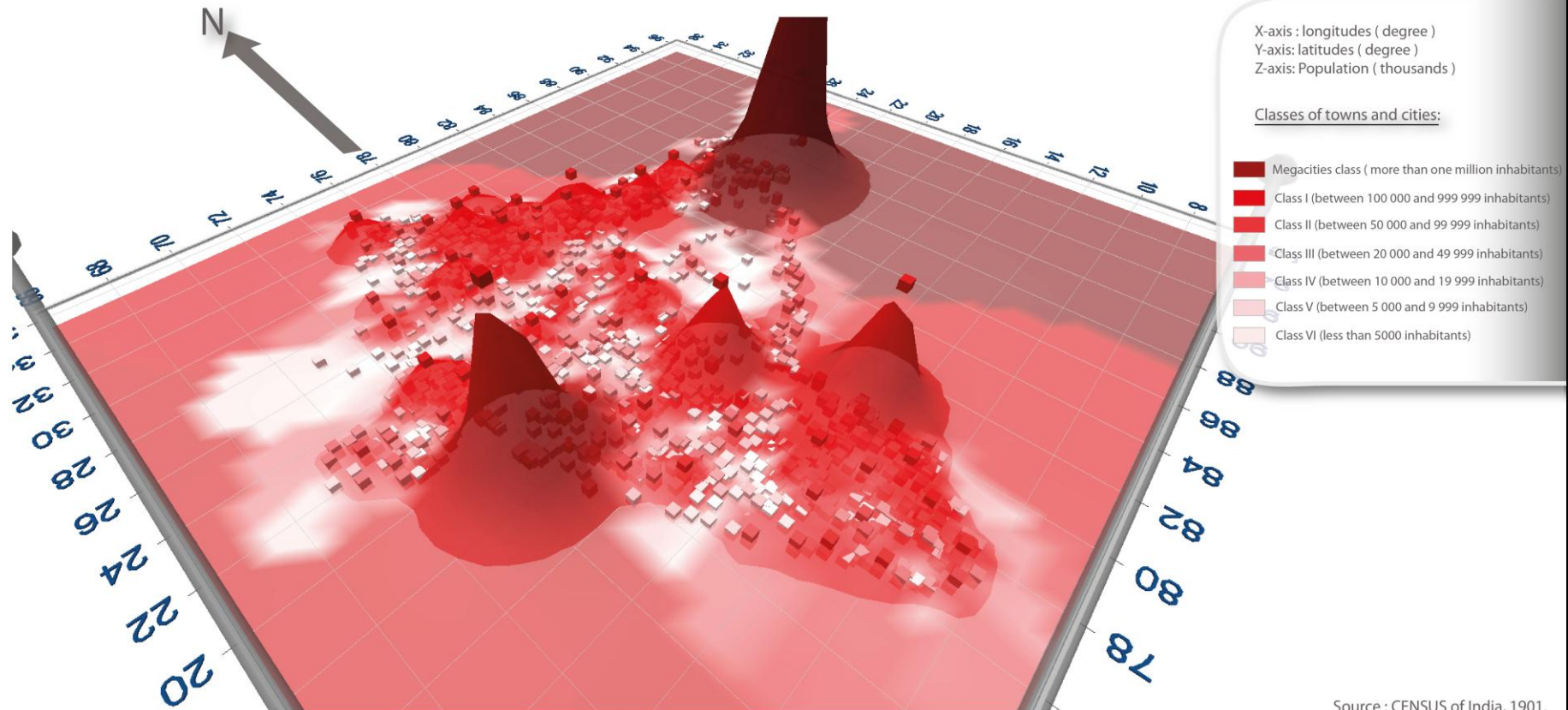
Disruptions or
fluctuations

Intrinsic properties of
the system

- Stability.
- Adaptability.
- Resistance.
- Capacity of abandon.
- Learning by the past.
- Diversity of the system.

* The resilience of the Indian urban system:

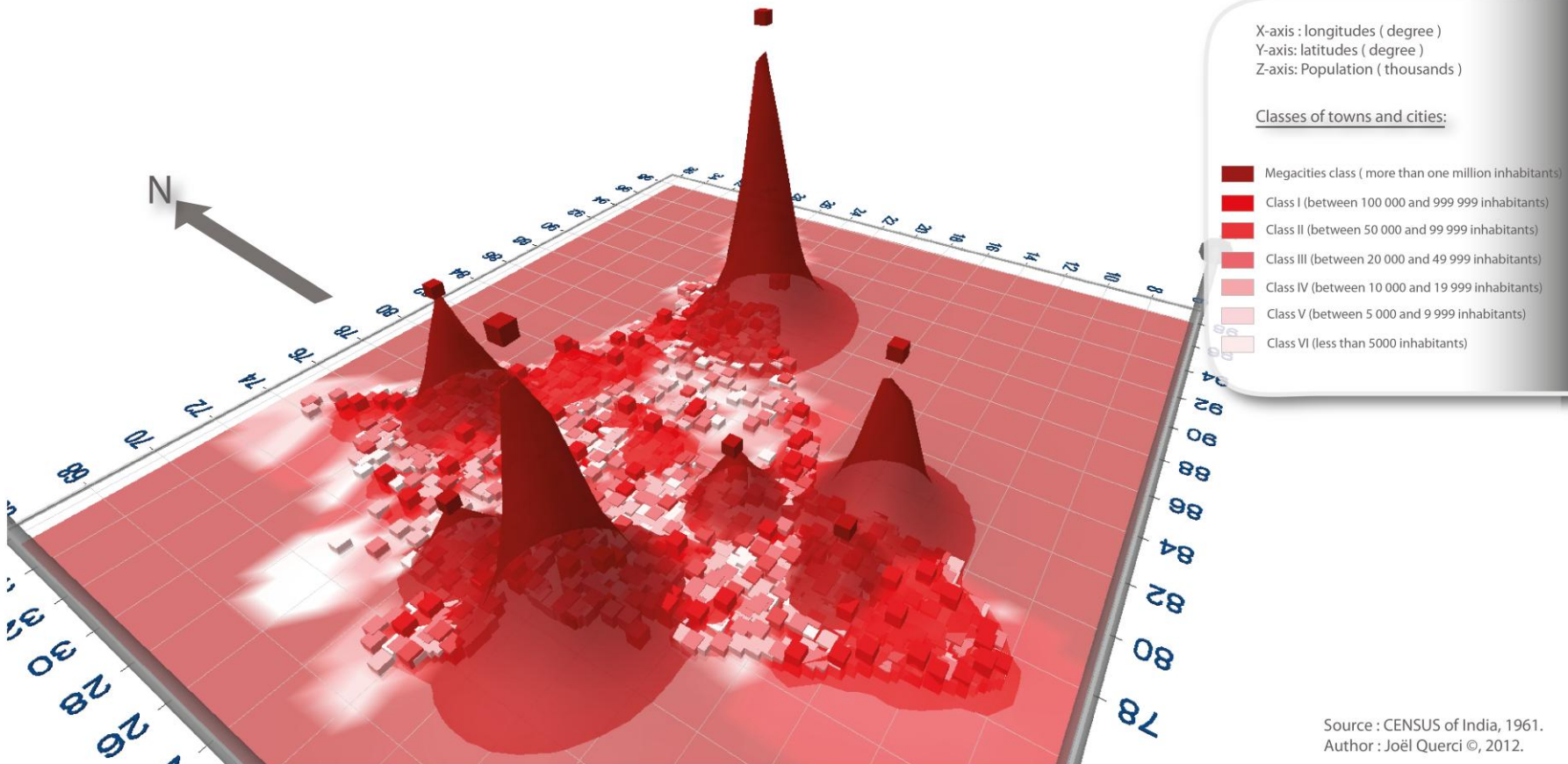
South - West view of the graphical projection of cities population in 1901.



Source : CENSUS of India, 1901.
Author : Joël Querci ©, 2012.

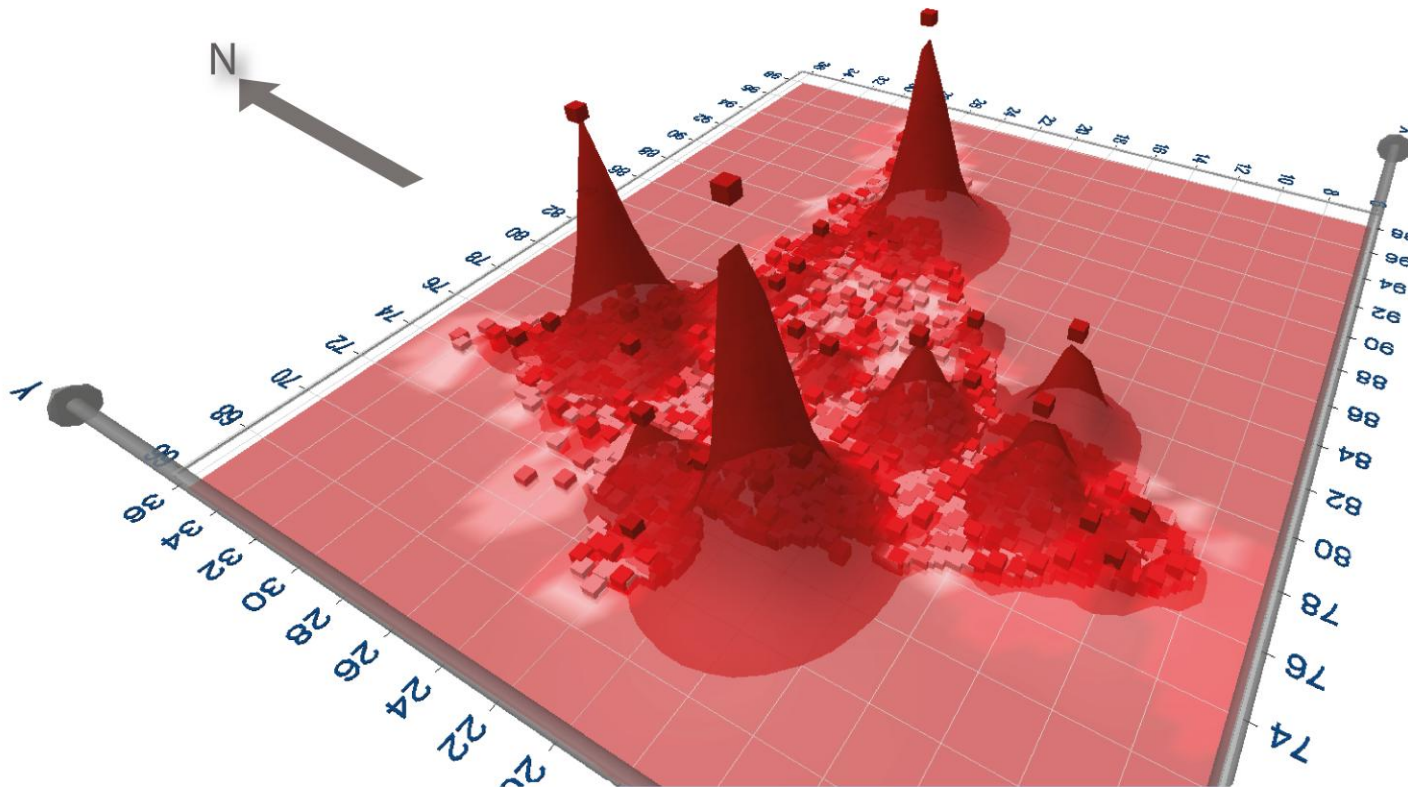
* The resilience of the Indian urban system:

South - West view of the graphical projection of cities population in 1961.



* The resilience of the Indian urban system:

South - West view of the graphical projection of cities population in 2001.



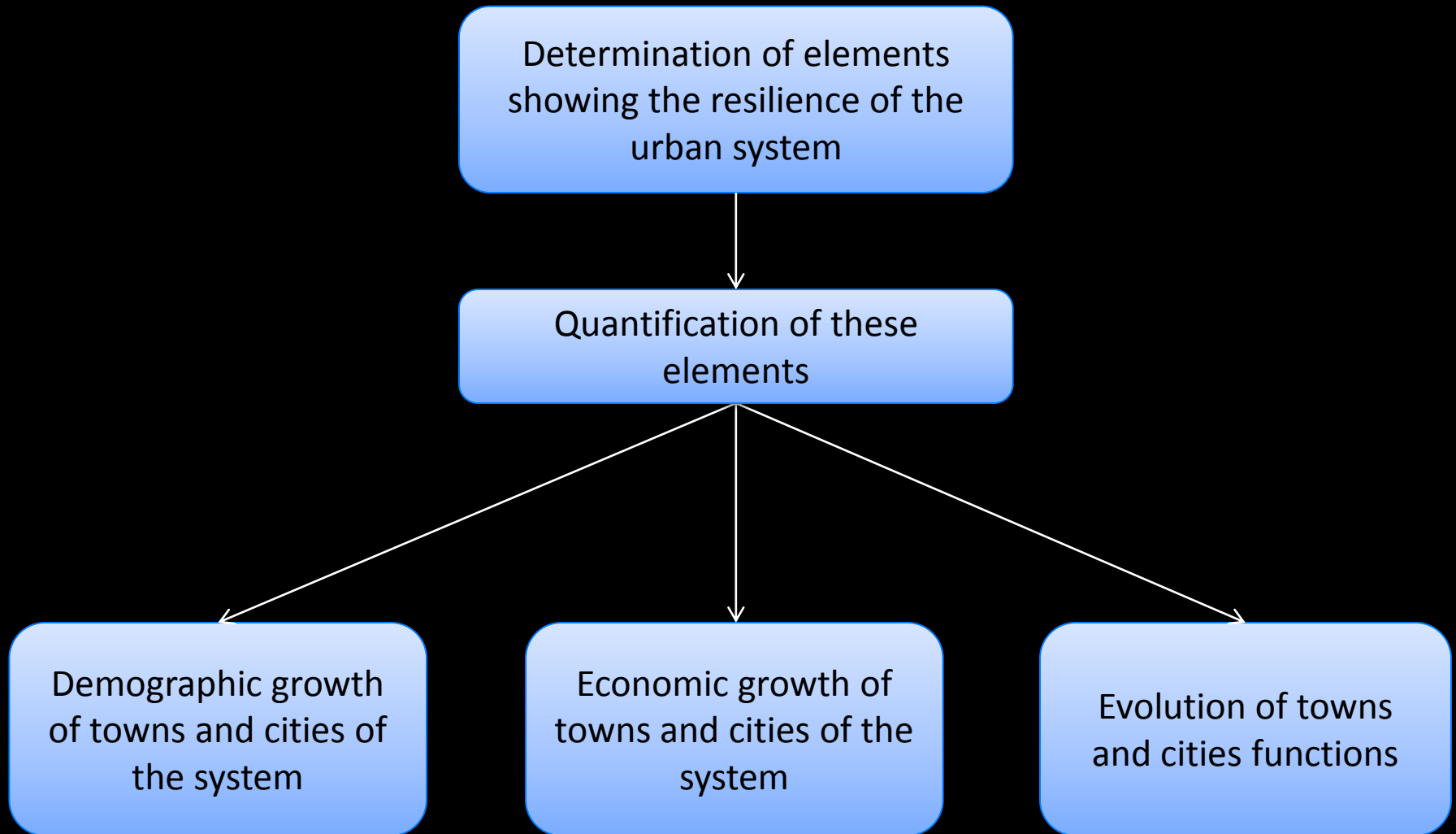
X-axis : longitudes (degree)
Y-axis : latitudes (degree)
Z-axis : Population (thousands)

Classes of towns and cities:

- Megacities class (more than one million inhabitants)
- Class I (between 100 000 and 999 999 inhabitants)
- Class II (between 50 000 and 99 999 inhabitants)
- Class III (between 20 000 and 49 999 inhabitants)
- Class IV (between 10 000 and 19 999 inhabitants)
- Class V (between 5 000 and 9 999 inhabitants)
- Class VI (less than 5000 inhabitants)

Source : CENSUS of India, 2001.
Author : Joël Querci ©, 2012.

* Perspectives and next steps of the research work:



* Thanks for your attention...



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