



Defining KBD and KCities

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Contents

- Demarcation and units of analysis
- Synthetic demarcation
- Analytic demarcation
- Applications
- Examples
- R&D

KCs and KBD

“The concepts of KBD and KC follow the realization that conventional economic analysis and economic growth theory fail to account for most of the distinctive value dimensions of knowledge-based production and overall social worth”

Knowledge Cities, 2006, p. xiii



Demarcation and units of analysis

Demarcation and units of analysis

- The problem of demarcation
- Units of analysis
- K-Economy and K-Society as a game:
 - Limits
 - Elements
 - Rules

Discipline institutionalization

- Ben-David 1972: conventional practices
- Organizations: WB, OECD, UNESCO, EC...
- Publications: JKM-SI, IJKBD, Elsevier, IGI...
- Conferences: IC4C, KCs Summit, ICKMIC...
- Associations: WCI, ICKS, NCP, Intellectus...
- Government Programs: Finland, Singapore, Montreal, Manchester, Monterrey, Melbourne...
- PhD Programs: Sheffield, Paris-Sud, MtyTech...

KBD affluents

- **Economics**
 - New or Endogenous Growth Theory
 - Knowledge-based Production
 - Behavioral and Evolutionary Economics
 - New Theory of the Firm
- **Urban Studies and Planning**
 - New Urbanism
 - Urban Environmentalism
- **Geography**
 - Human Geography
 - Knowledge Flows
 - Territoriality

KBD affluents

- Neuroscience (including the Artificial Intelligence and Nanotechnology convergence)
- Psychology of Science and Technology (from social cognition through accelerated innovation)
- Anthropology and Sociology of Knowledge (e. g., Identity and Cohesion)
- Social Studies of Science
- Political Economy of Knowledge and Technology
- Innovation Management
- ICTs
- Knowledge Management and Intellectual Capital



Synthetic demarcation

Three KBD generations

<i>Generation</i> Attribute	<i>I Generation: Object - centered</i>	<i>II Generation: Agent - centered</i>	<i>III Generation: Context - centered</i>
Knowledge concept	Information record	Capacity flow	Value allignement
Capitalization process	Accumulate and retain stock	Facilitate and increase circulation	Dynamically adjust to a sustainable value balance
KBD definition	KBD is an infrastructure to increase the social stock of knowledge	KBD is a policy to propitiate the social flow of knowledge	KBD is a strategy based on the identification, systematization and development of the social capital universe

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Transitional vs. Radical

- Increase in monetary mass resulting from technological+educational productivity leverage

versus

- Dynamic equilibrium between all common value elements in a community

Defining KBD

*Deliberate, balanced and systematic
development of a community's
overall value base*

Center for Knowledge Systems
Technical Note CSC2003-07

Defining K-Cities

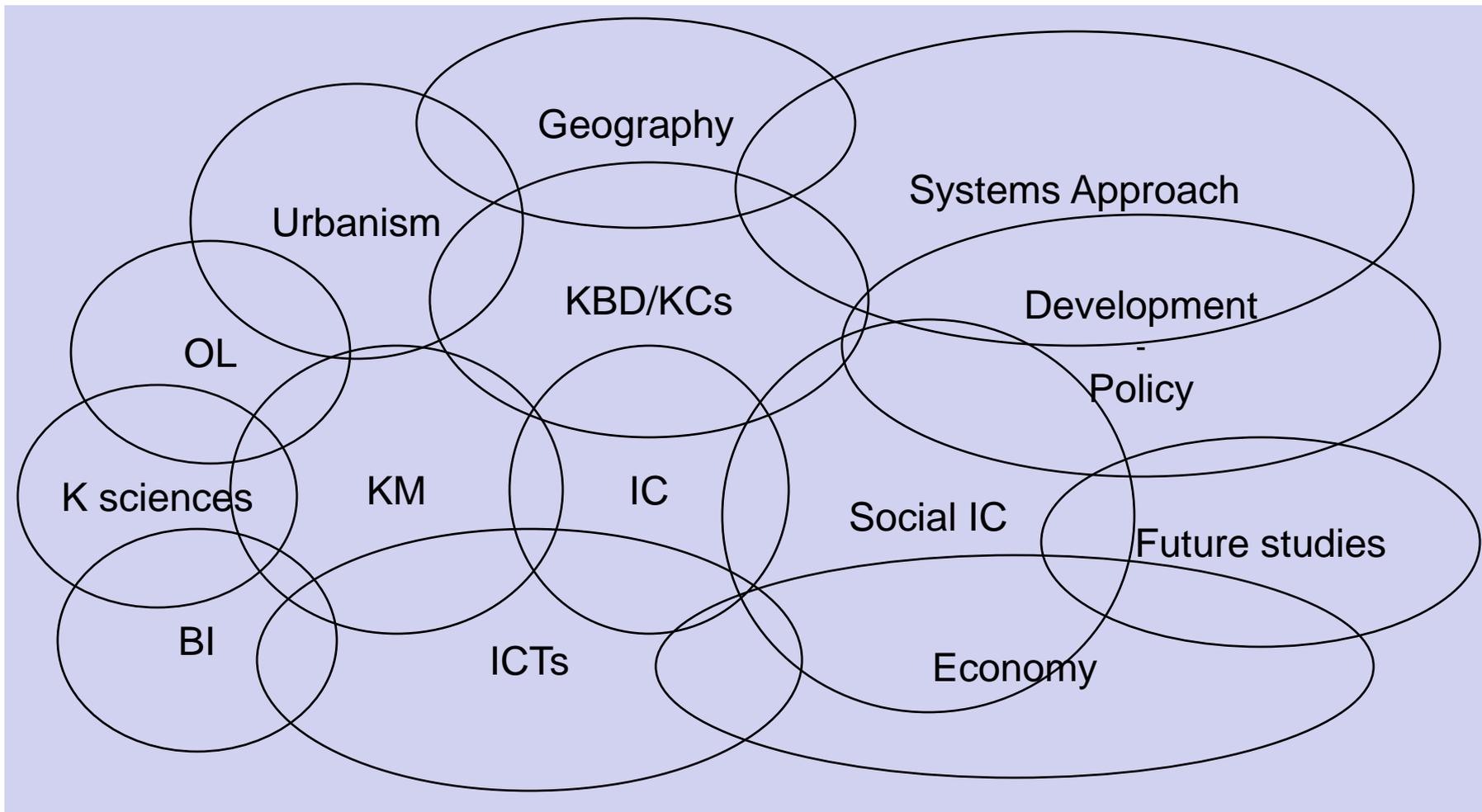
“a permanent settlement of relatively higher rank in which the citizenship undertakes a deliberate, systematic attempt to identify and develop its capital system in a balanced, sustainable manner”

Capital Cities: A taxonomy of capital accounts for knowledge cities
Journal of Knowledge Management, Vol. 8, No. 5, October 2004

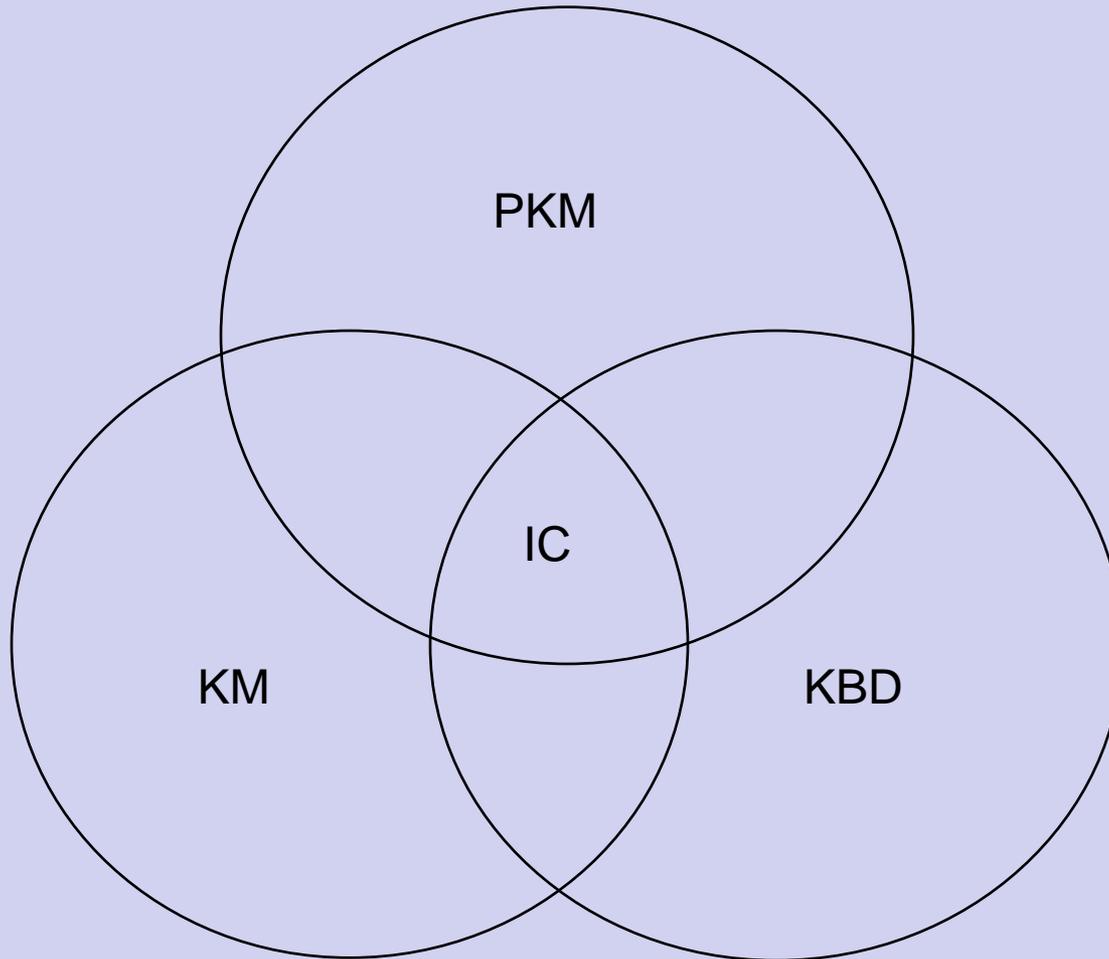


Analytic demarcation

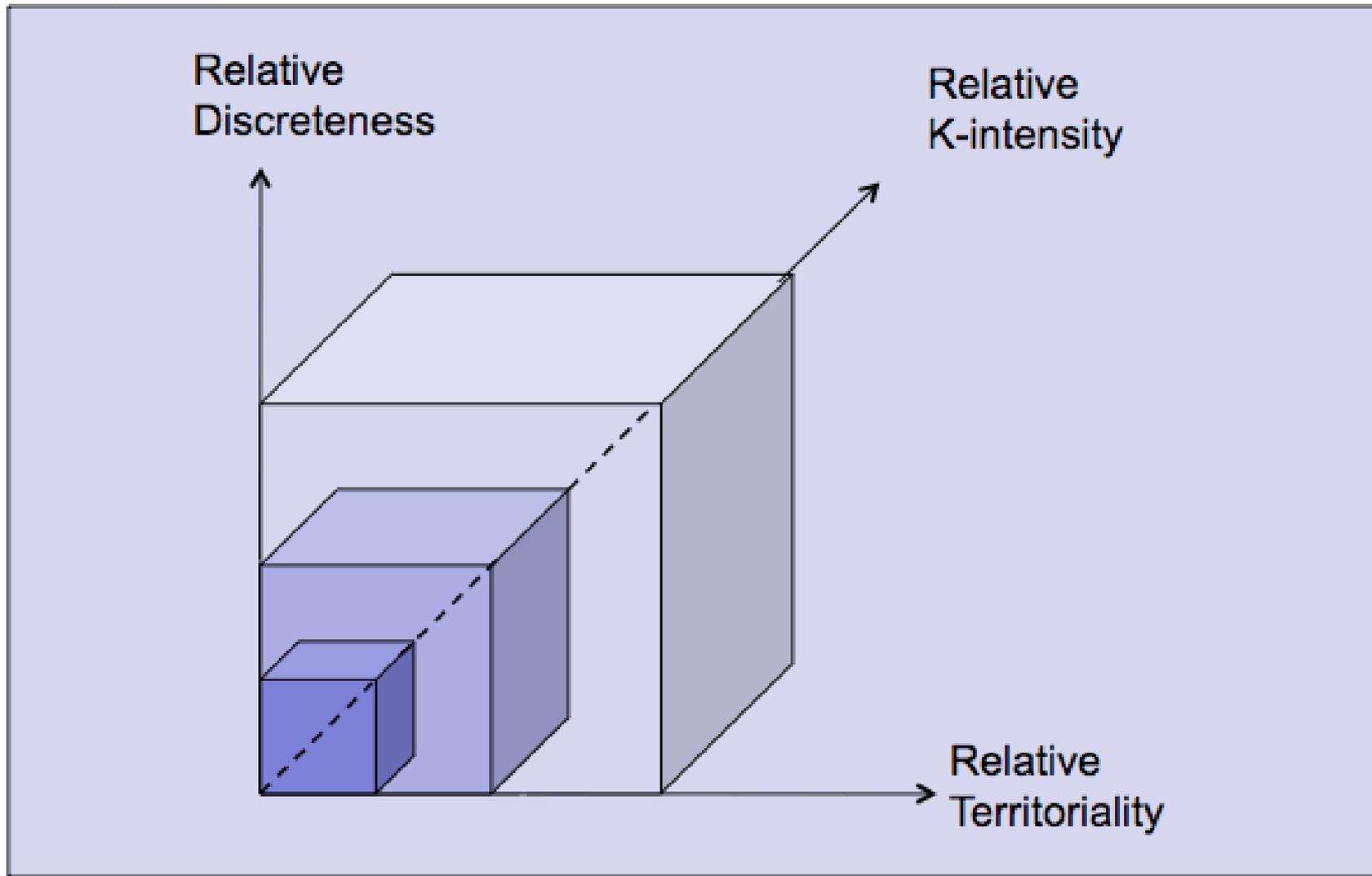
KBD and IC: descriptive view



KBD and IC: integrated view



KBD dimensional continua



KBD dimensional continua

	Geopolitical	Social	Cultural-Economic
DIMENSION	Territoriality & Political demarcation	Human molarity	Knowledge intensity
OBJECT	Space	Communities	Social value
QUESTION	Where?	Who?	How much?
MINIMUM UNIT	Neighborhood / district	Inter-organizational processes, clusters	Single process or value dimension
INTERMEDIATE UNIT	Region / Country	Macrouban and national communities	Regional and national knowledge programs
MAXIMUM UNIT	The Earth / All nations	Mankind	World Capital
DISCIPLINES	Geography, Political Scence	Social Psychology, Sociology, Antropology	Knowledge Management, Economics



Applications

Applications

- Policies and Programs
- Fund eligibility
- Project selection and assessment
- Editorial review
- Benchmark and award categorization
- Conference structuring
- Research agendas
- Discipline demarcation and taxonomy

Applications

- ¿Are reputed KBD urban or national policies actually knowledge-based ones?
- ¿Is this or is not a Knowledge City?
- ¿What range of projects are eligible to a KBD fund?

Applications

- ¿ Does a particular paper belong into a given KBD publication?
- ¿ Should categories be set for a KBD award and if so which ones?
- ¿ How could contributions to a conference be systematically grouped?

WCI programs



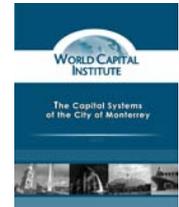
- Editorial

- Annual JKM SI on KBD, 2002– (Emerald)
- Knowledge Cities (Elsevier, 2007)
- IJKBD (Inderscience)
- IGI Global
- Reports



- Events

- Knowledge Cities Summit
- Regional conferences (ICKMIC India; ICKS Valencia)



- Awards and benchmarks

- MAKCi Awards
- City and national profiles





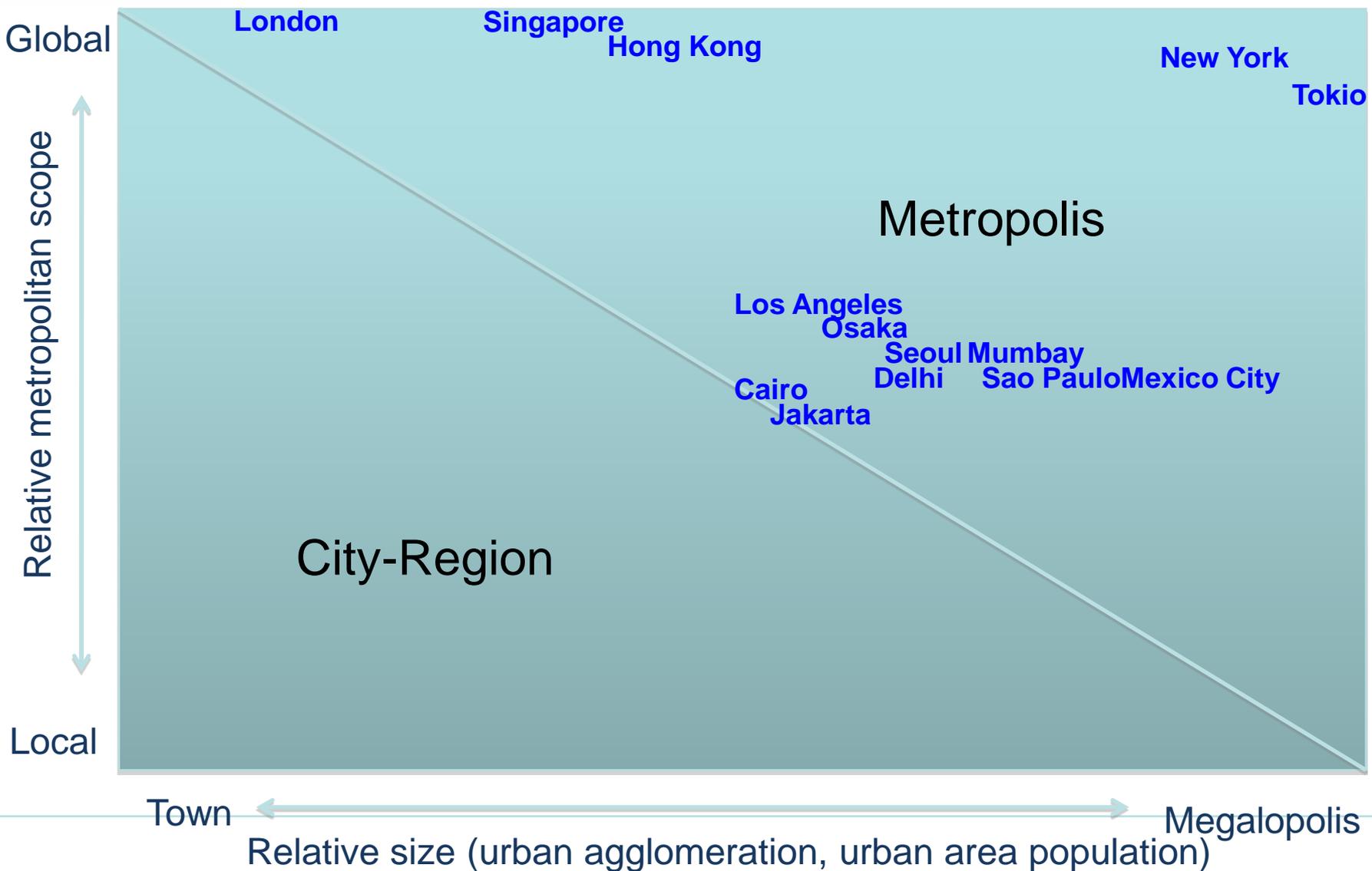
Examples

Metropolis vs. City-region

- **Relative scope**, e.g.: *Alpha World Cities* (A Roster of World Cities, J.V. Beaverstock, R.G. Smith and P.J. Taylor) and *Globalization Index* (A.T. Kearney/Foreign Policy Globalization Index 2007)
- **Relative size**, e.g.: *100 largest urban agglomerations in the world* (UN World Urbanization Prospects Report 2007) and *Urban area population ranking* (United Nations CDFC, ESDF, ESDJ, CDJC)

Metropolitan profile examples

(10 largest metropolitan areas, 10 alpha cities, boundary cases)



CITY-REGION

MAs –METROPOLITAN AREAS (Sperling & Sander)

<http://www.merriam-webster.com/dictionary/CITY>

- Etymology:

Middle English *citie* large or small town, from Anglo-French *cit *, from Medieval Latin *civitat-*, *civitas*, from Latin, citizenship, state, city of Rome, from *civis* citizen — more at [hind](#)

Date: 13th century

1 a: an inhabited place of greater size, population, or importance than a town or village **b:** an incorporated British town usually of major size or importance having the status of an episcopal see **c***capitalized* (1): the financial district of London (2): the influential financial interests of the British economy **d:** a usually large or important municipality in the United States governed under a charter granted by the state **e:** an incorporated municipal unit of the highest class in Canada

2: [city-state](#)

- **Attributes:**

Regional political, economic or cultural center

and

Medium size ($\geq 1.5M \leq 6M = 200$ next largest cities)

Metropolis

MDs -METROPOLITAN DIVISIONS (Sperling & Sander)

<http://www.merriam-webster.com/dictionary/metropolis>

- **Etymology:**

Middle English, from Late Latin, from Greek *mētropolis*, from *mētr-*, *mētēr* mother + *polis* city — more at [mother](#), [police](#)

Date: 14th century

1: the chief or capital city of a country, state, or region

2: the city or state of origin of a colony (as of ancient Greece)

3 a: a city regarded as a center of a specified activity **b:** a large important city

- **Attributes:**

National capital or major economic or cultural center

and

Larger size (≥ 6 million = 50 largest cities)

Knowledge City-region

- *Medium size ($\geq .5M \leq 3M$) cities/towns acting as regional center for political, economic or cultural activities*
- Regional political, economic or cultural center
and
- Medium size ($\geq .5M \leq 3.5M = 900$ next largest cities/towns worldwide)

Knowledge Metropolis

- *Largest to medium (over 3M) urban conglomerates often acting as international hubs for political, economic or cultural activities*

- National capital or major international economic or cultural center

and

- Larger size (≥ 3 million = 100 largest cities in the world)

Research agenda

- Dynamics of social knowledge-based value creation
- Identification, measurement and strategic development of social intellectual capital
- National, regional and urban KBD planning and development
- Knowledge Cities concepts and models
- Descriptions and assessments of implementation cases
- Metrics, benchmarkings and comparative analyses
- Social accounting and strategy deployment

Research agenda

- Social accounting and strategy deployment
- Social learning networks and social knowledge bases
- Knowledge citizenship, access to information and distributed participation
- ITCs and social bases of instrumental capital
- KBD policy and cultural issues
- Global marginalization and the knowledge divide
- Systems perspectives on KBD
- Radical KBD as a strategic and disruptive paradigm



THANK YOU!

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<http://www.sistemasdeconocimiento.org>

