

# Planetary urbanization in comparative perspective

Christian Schmid  
ETH Zürich, FCL Singapore

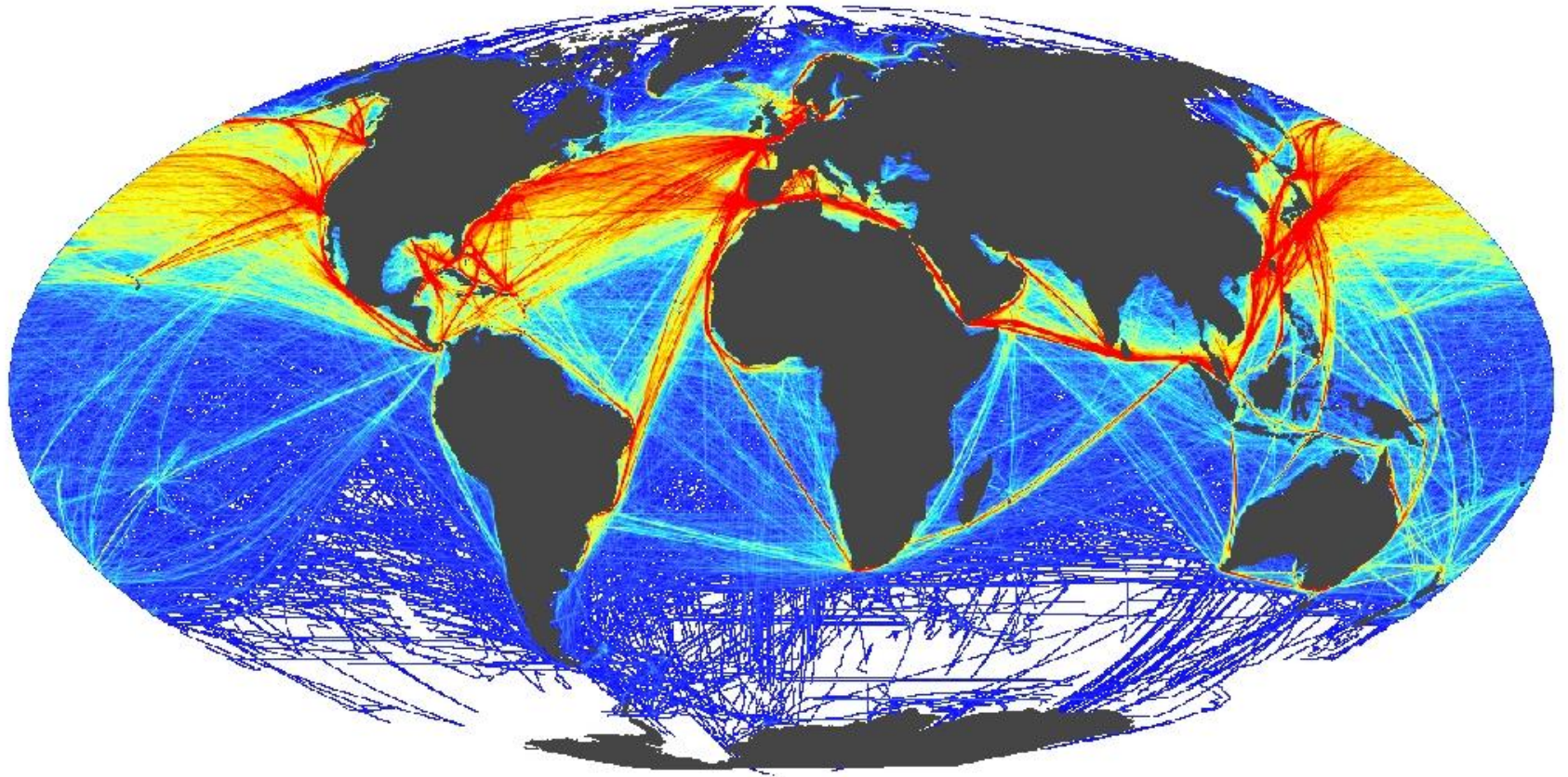
# planetary urbanization

Neil Brenner, Christian Schmid

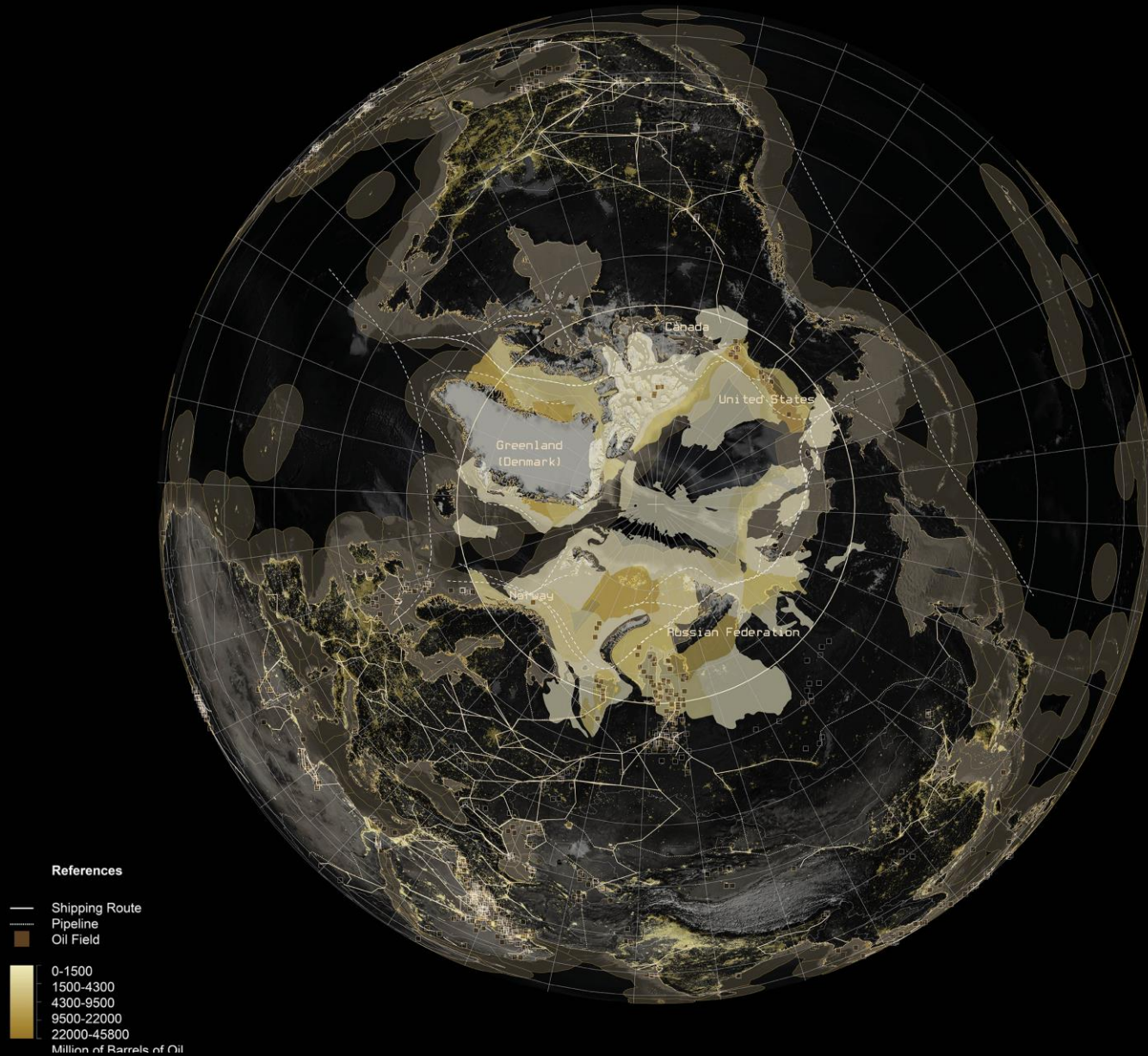
- planetary reach of urbanization processes
- planetary perspective

decentering of analytical perspective

Brenner, Neil and Christian Schmid (2015). 'Towards a new epistemology of the urban?', *City* 19/2–3: 151–82.



Global shipping lanes: Wang, Corbett, Firestone 2007



Neil Brenner, Urban Theory Lab, Harvard GSD: Extreme territories of urbanization. The Arctic.

An aerial photograph of a vast construction site, likely for a large-scale infrastructure project. The terrain is heavily excavated, showing a complex network of winding roads, embankments, and large open areas. The ground is a mix of dark earth and lighter, possibly sandy or silty, soil. There are several small structures and vehicles scattered across the site. The overall scene is one of intense industrial activity and land transformation.

jovis

# IMPLOSIONS / EXPLOSIONS

TOWARDS A STUDY OF PLANETARY URBANIZATION

EDITED BY NEIL BRENNER



ETH Studio Basel: The Inevitable Specificity of Cities.  
Lars Müller Publishers, Zürich 2015.



ETH Studio Basel: Territory. Zürich 2016.

# urbanization

Ildefonso Cerdà, David Harvey, Henri Lefebvre

- material production – spatial practices
- production of knowledge – territorial regulation
- production of meaning – lived space and everyday life



# Patterns and Pathways of Planetary Urbanization

(ETH Zürich / FCL Singapore)

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Pascal Kallenberger,  
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Anne Kockelkorn,  
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Monika Streule,  
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**Tokyo**

**Hong Kong / Shenzhen/  
Dongguan**



**Kolkata**

**Istanbul**

**Lagos**

**Paris**



**Mexico City**

**Los Angeles**

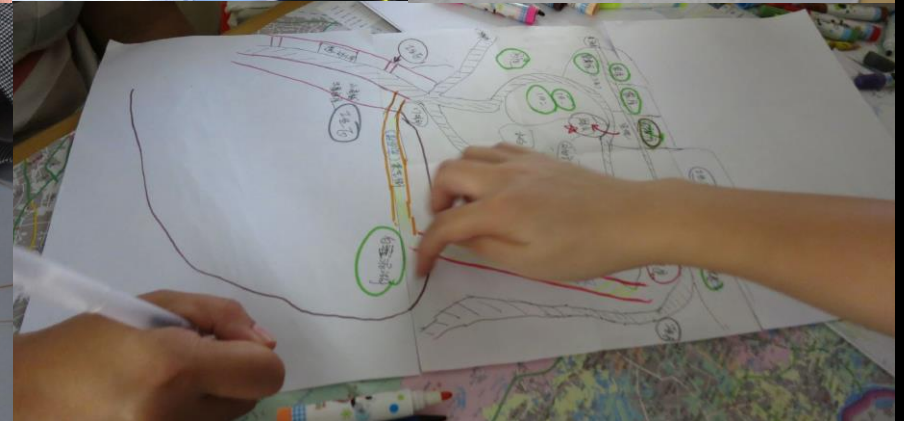
# comparative strategies

Jennifer Robinson (2016)

- thinking through elsewhere
- genetic comparisons: how are different urban outcomes produced?
- generative comparisons: bringing different cases in conversation with each other

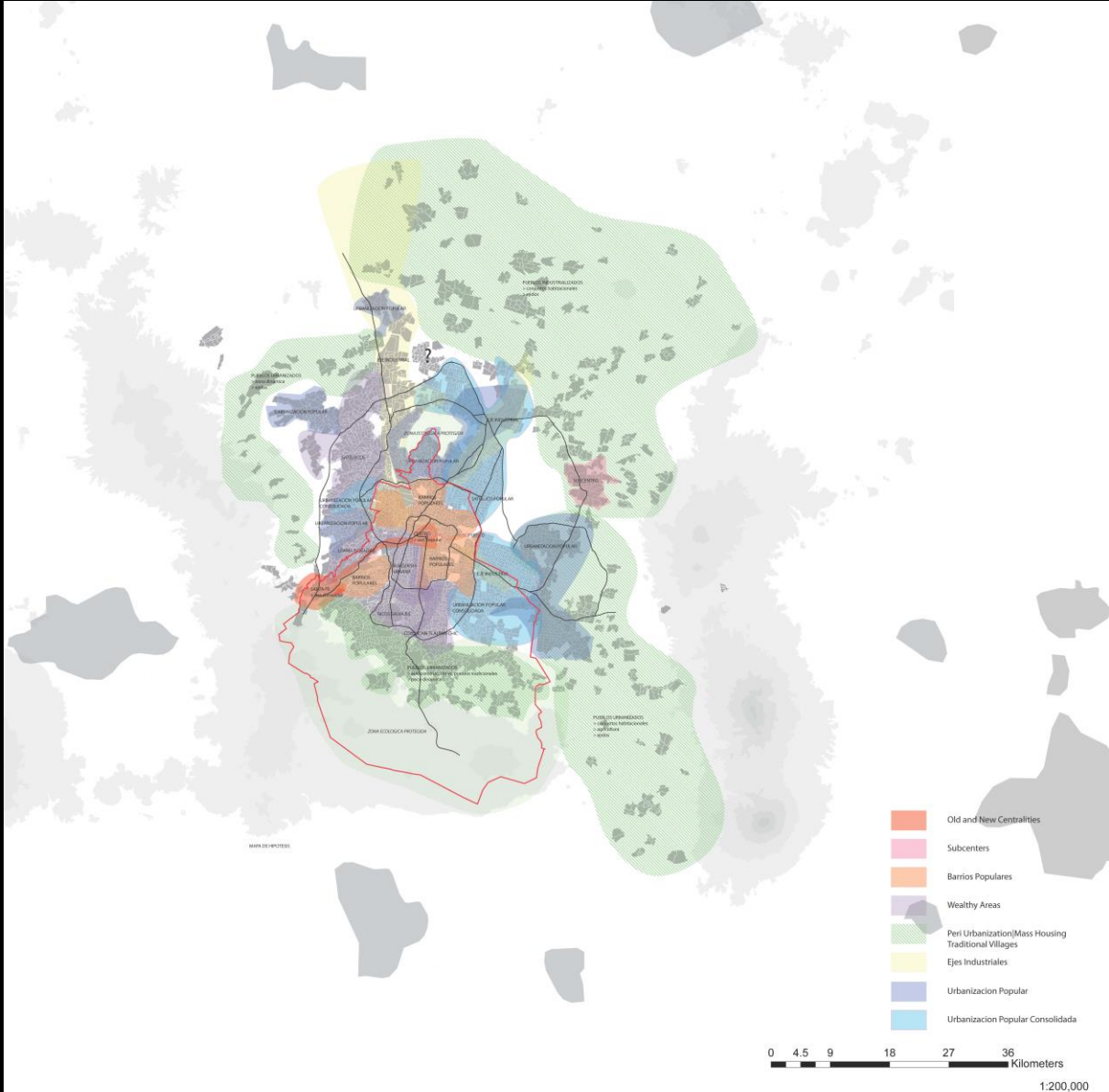
comparison as an instrument of theory building

# 1 Mapping





# 3 Urban configurations: comparative moment 1



# 4 Comparative workshops: comparative moment 2



# processes of urbanization: maps

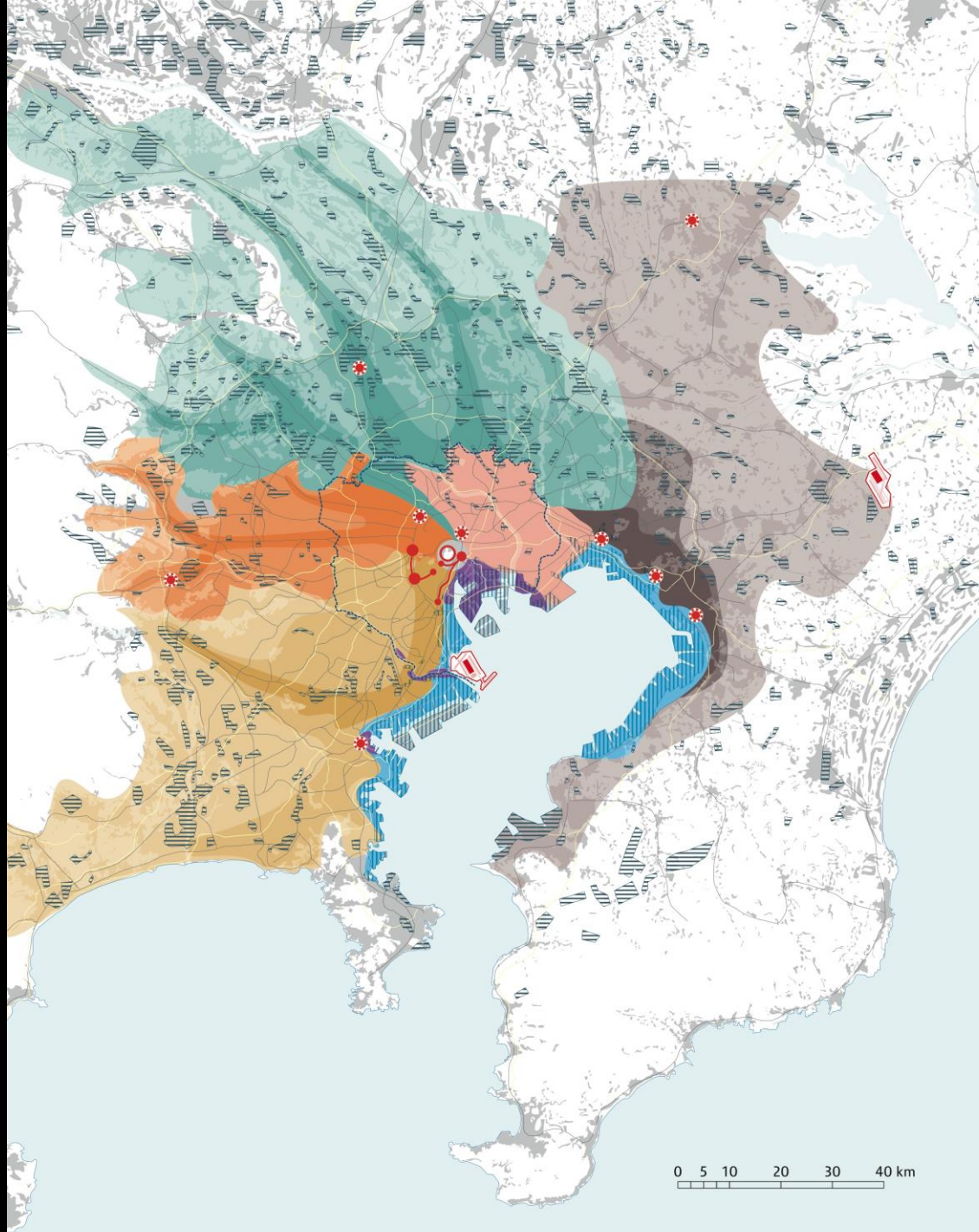
cartography:

Dorothee Billard

Roger Conscience

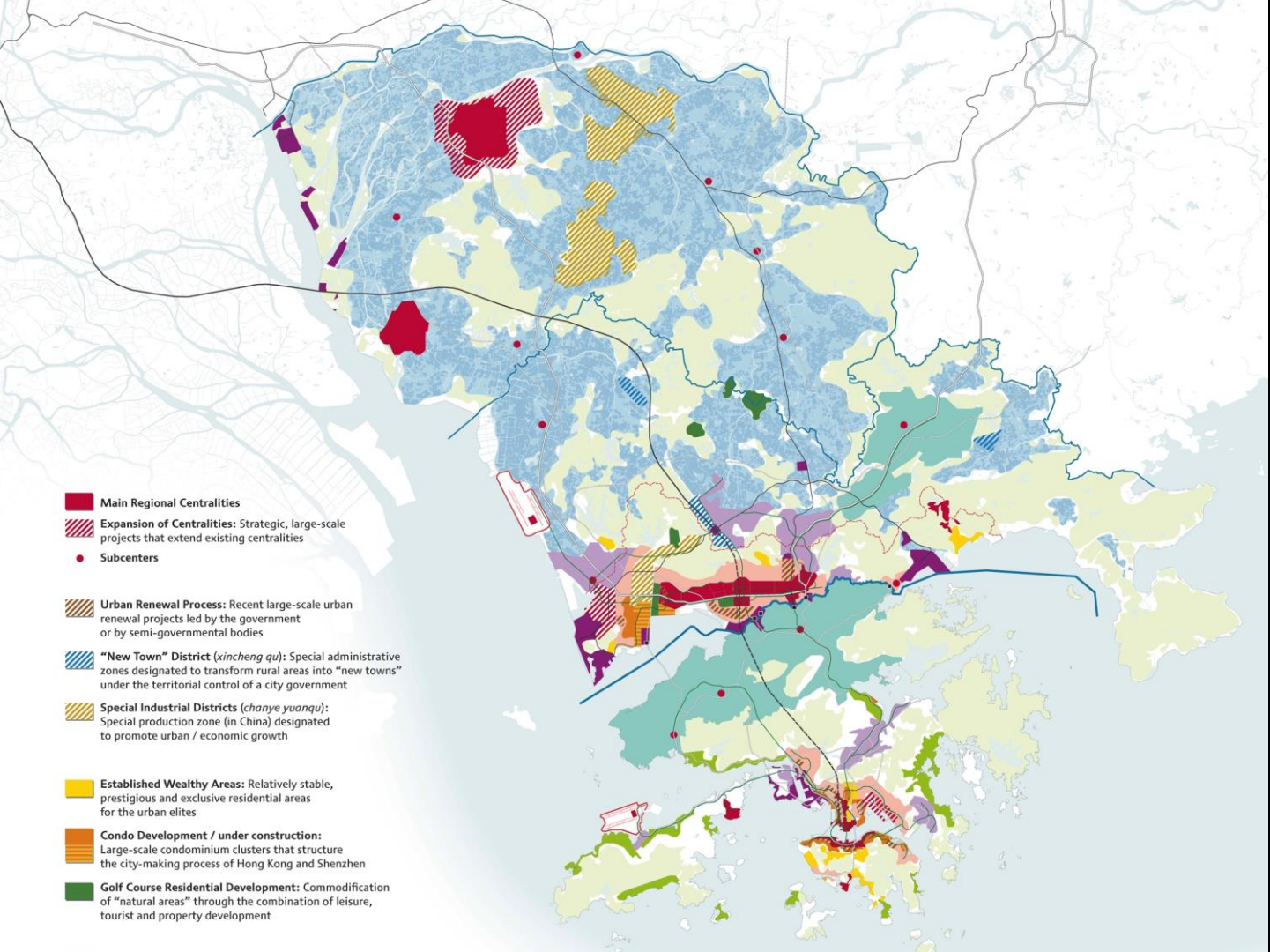
Philippe Rekacewicz





-  **Archipelago of Main Regional Centralities**
-  **Specialized Regional Centralities**
-  **Tōkaidō - Laminar Urbanization I:**  
Long established urban area with a socially and morphologically homogeneous structure, oriented towards the infrastructural corridor along the coastline
-  **Yamanote - Laminar Urbanization II:**  
Continuous and tightly woven residential urban fabric stretching from the central archipelago to the mountains without significant centralities
-  **Shitamachi - Urban Legacy:**  
Old traditional commercial and manufacturing area dominated by small-sized workshops
-  **Konjūka - Multilayered Patchwork Urbanization:** Socio-economic mix of established and new residents, large-scale infrastructures and dispersed industrial clusters form a landscape of diverse rhythms and historical trajectories
-  **Kōhachi - Peripheral Urbanization:**  
Peripheral area including different morphological and functional clusters; still largely characterized by agrarian production
-  **De-Industrialization:** Old industrial belt stretching along Tokyo Bay, dominated by large-scale production sites; marked by relocation of manufacturing industries and redevelopment for residential use
-  **Old Industrial Sites**
-  **Transforming Waterfront:** Former industrial sites along the waterfront are transformed into socially and morphologically isolated condominium clusters providing new 'suburban' living in a highly urbanized context
-  **New Industrial Urbanization:**  
Industrial clusters along transport infrastructure accommodating some of the manufacturing plants from the bay area
-  **Urban Footprint**
-  **23 Wards (inner city)**
-  **Main railroads**
-  **The pale yellow lines represent the motorways**
-  **Airport**

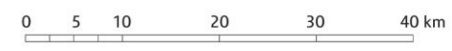




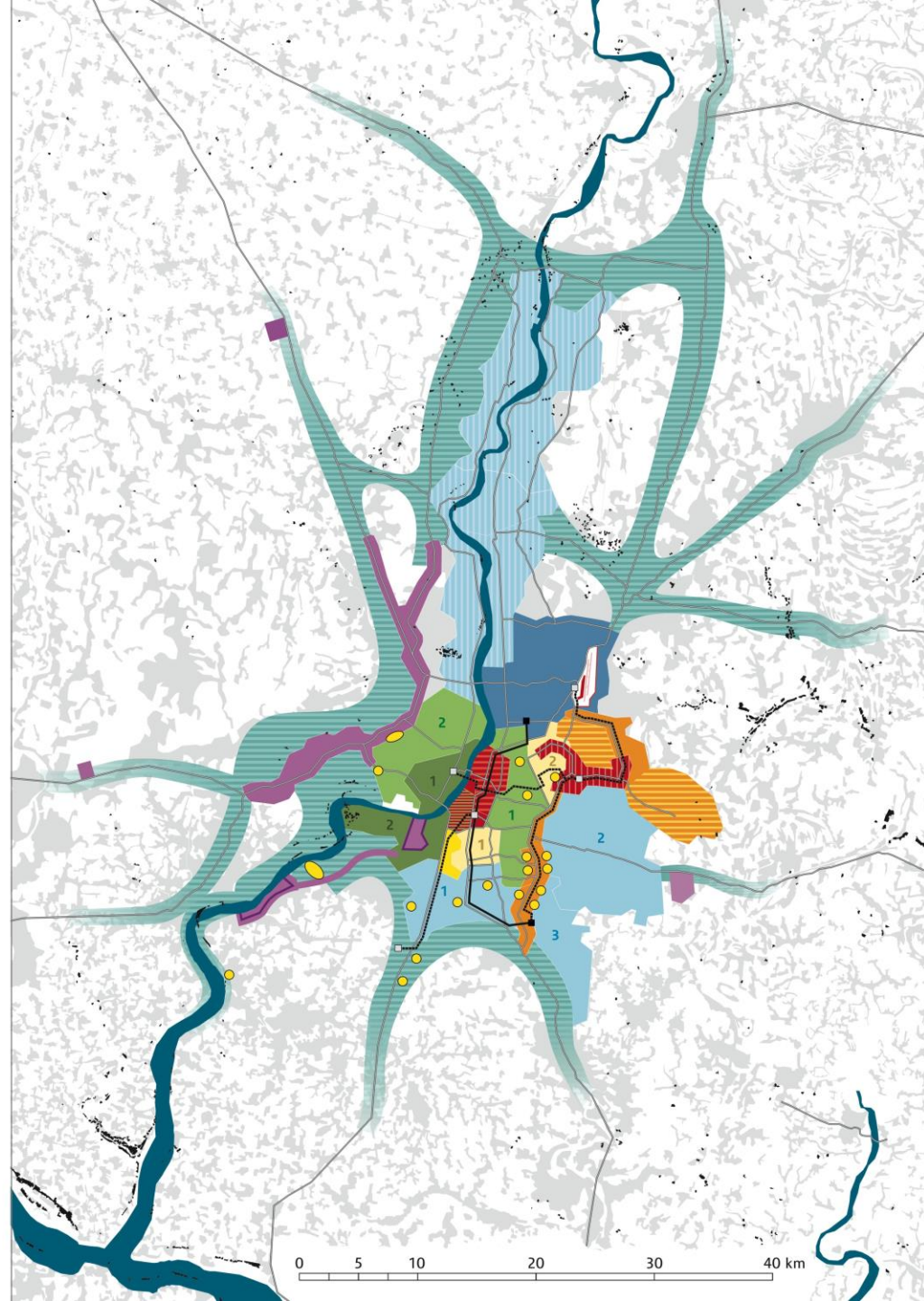
- Main Regional Centralities**
- Expansion of Centralities:** Strategic, large-scale projects that extend existing centralities
- Subcenters**
  
- Urban Renewal Process:** Recent large-scale urban renewal projects led by the government or by semi-governmental bodies
- "New Town" District (*xincheng qu*):** Special administrative zones designated to transform rural areas into "new towns" under the territorial control of a city government
- Special Industrial Districts (*chanye yuanqu*):** Special production zone (in China) designated to promote urban / economic growth
  
- Established Wealthy Areas:** Relatively stable, prestigious and exclusive residential areas for the urban elites
- Condo Development / under construction:** Large-scale condominium clusters that structure the city-making process of Hong Kong and Shenzhen
- Golf Course Residential Development:** Commodification of "natural areas" through the combination of leisure, tourist and property development
  
- Post-Industrial Areas:** Former industrial areas facing radical socio-economic changes as a result of industrial restructuring and relocation of factories
- Peripheral Residential Areas:** Low density areas in Hong Kong, resulting from specific planning restrictions
- Industrial Towns:** Typical process of industrialization in rural China through the development of designated towns (*chengzhen*)
- Commuting Areas:** Mass transit-oriented residential areas in Hong Kong and commuter towns in Shenzhen
- Multi-Layered Patchwork Urbanization (Mulapa):** Transitional, heterogeneous and multi-territorial areas emerging outside or in-between city centers

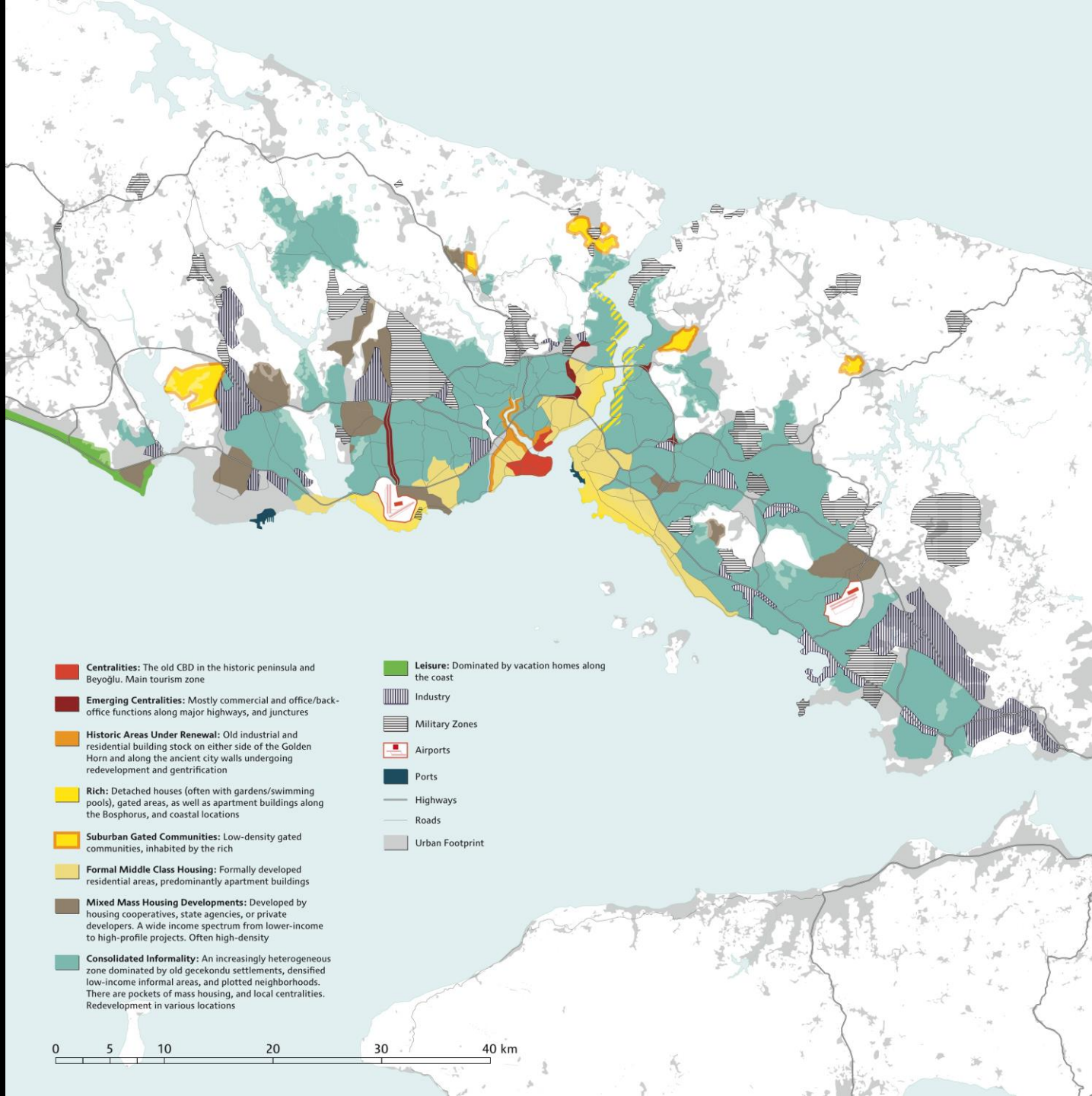
- Ecological Areas, National Parks and Country Parks:** Legally protected zones to preserve natural areas for public use and to limit urban sprawl
- Logistics Hubs:** Export-processing areas embedded in vast infrastructures (e.g. ports, railway and truck terminals, tariff free zones etc.)
- Airport**
- Urban Footprints**

- City borders**
- Between Hong Kong and Shenzhen
- Others
- National high-speed railways
- Existing
- Under construction
- National railways
- Metro lines
- Historical border of the Special Economic Zone (1980-2010)
- Main highways and roads
- National
- Regional



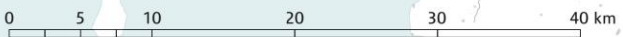
-  **Old Center:** Commercial and governmental functions; park
-  **Bazaar:** Very densely populated, main commercial activities
-  **New Centrality:** New IT and business districts
  
-  **Bypass - Condominium Complex:** Multifunctional area with multi-story housing, private hospitals, shopping malls, etc.
-  **Bypass - Rajarhat:** Very recent huge new town project
-  **Tower City:** Newly built residential high rise buildings, often embedded in poor neighborhoods
-  **Old Rich Area - Alipore:** The prestigious old residential area of Kolkata
  
-  **Urban Middle-Class Residential Areas**
  - 1 **South Kolkata:** Mainly inhabited by an old urban elite
  - 2 **Salt Lake:** Modernist satellite town for the new urban middle class
  
-  **Patchwork Urbanization:** Working-class and lower middle-class housing with factories, office buildings and logistics centers
-  **Old Train Suburbs:** Working-class commuting areas, established between the mid 19th and early 20th century
-  **Popular Urbanization:**
  - 1 **New Bangladesh:** Relatively wealthy Hindu immigrants from former East Bengal
  - 2 **East Kolkata Wetlands:** Relatively poor self constructed settlements
  - 3 **New South Kolkata:** New urban sprawl, self constructed settlements
  
-  **Bustee Area:** Old low-rise sub-working class tenement areas
  - 1 **Kolkata**
  - 2 **Howrah**
-  **Plotted Urbanism:** Former bustee areas, recently overbuilt with informal multi-story buildings
  - 1 **Howrah**
  - 2 **Harbour Area**
-  **Urban Villages:** Densely populated agrarian belt
  
-  **New industrial parks and logistics centers.**
-  **Port infrastructures**
-  **Brick factories**
-  **Urban footprint**
-  **Airport**
-  **Main highways and roads**
- Metro and elevated metro lines and stations**
  -  **Existing**
  -  **Under construction**

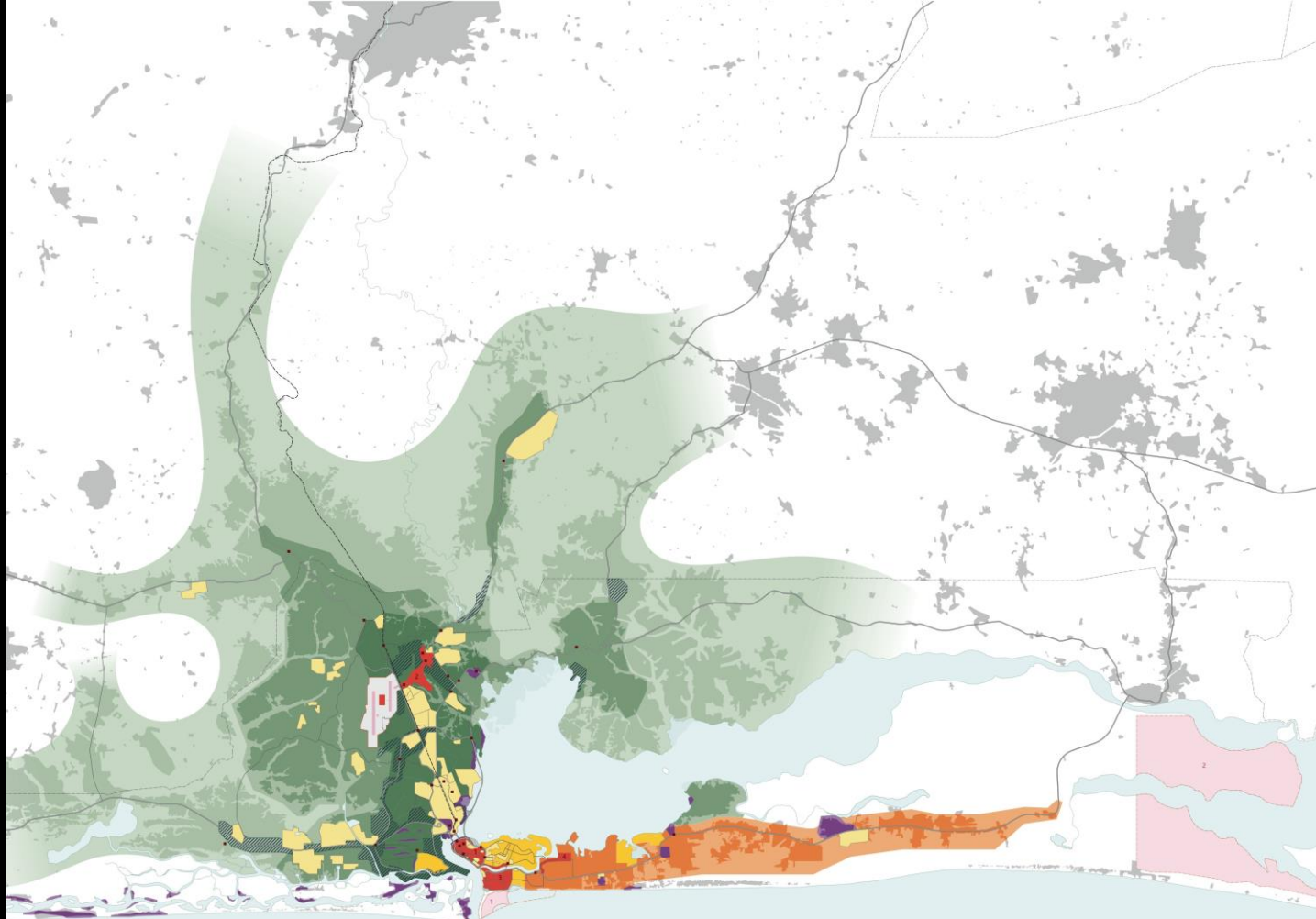




- Centralities:** The old CBD in the historic peninsula and Beyoğlu. Main tourism zone
- Emerging Centralities:** Mostly commercial and office/back-office functions along major highways, and junctures
- Historic Areas Under Renewal:** Old industrial and residential building stock on either side of the Golden Horn and along the ancient city walls undergoing redevelopment and gentrification
- Rich:** Detached houses (often with gardens/swimming pools), gated areas, as well as apartment buildings along the Bosphorus, and coastal locations
- Suburban Gated Communities:** Low-density gated communities, inhabited by the rich
- Formal Middle Class Housing:** Formally developed residential areas, predominantly apartment buildings
- Mixed Mass Housing Developments:** Developed by housing cooperatives, state agencies, or private developers. A wide income spectrum from lower-income to high-profile projects. Often high-density
- Consolidated Informality:** An increasingly heterogeneous zone dominated by old gecekondu settlements, densified low-income informal areas, and plotted neighborhoods. There are pockets of mass housing, and local centralities. Redevelopment in various locations

- Leisure:** Dominated by vacation homes along the coast
- Industry**
- Military Zones**
- Airports**
- Ports**
- Highways**
- Roads**
- Urban Footprint**





**Main Regional Centralities**

- 1 **Lagos Island:** Center of the "hustle": historic core, extreme density of housing and markets, old CBD
- 2 **Ikeja:** Center of Lagos State government, focus of recent development
- 3 **Victoria Island:** Upmarket CBD
- 4 **Admiralty Way:** Emerging centrality in the bypass axis

■ **Nodal Centralities:** Markets, transport interchanges

**Planned Large Scale Projects**

- 1 **Eko Atlantic:** New luxury island
- 2 **Lekki Free Trade Zone:** planned industrial, manufacturing and residential zone with new port and airport

■ **Bypass Urbanism:** Rapid development of new privileged urban axis through public-private funding

■ **Lagos Elite:** Concentration of wealth and privilege in low-density residential areas.

■ **Formally Designed Areas:** Areas with planned layouts and higher levels of centrally provided infrastructure: neighborhoods with colonial layout, public facilities, privatized public housing, and wealthy residential estates

■ **Plotted Development:** Systematic piecemeal development and redevelopment of residential neighbourhoods

■ **Central:** Densely plotted well-located neighbourhoods with some redevelopment e.g. Itire

■ **Far:** More recent densely plotted neighbourhoods e.g. Ikotun, with 3-5 hour commute to the centers

■ **Peripheral expansion:** New plotted development in the periphery

■ **Popular Urbanization:** Highly insecure housing on topographic peripheries

■ Industrial Zones

■ Airport

■ Urban Footprint

■ Marshland

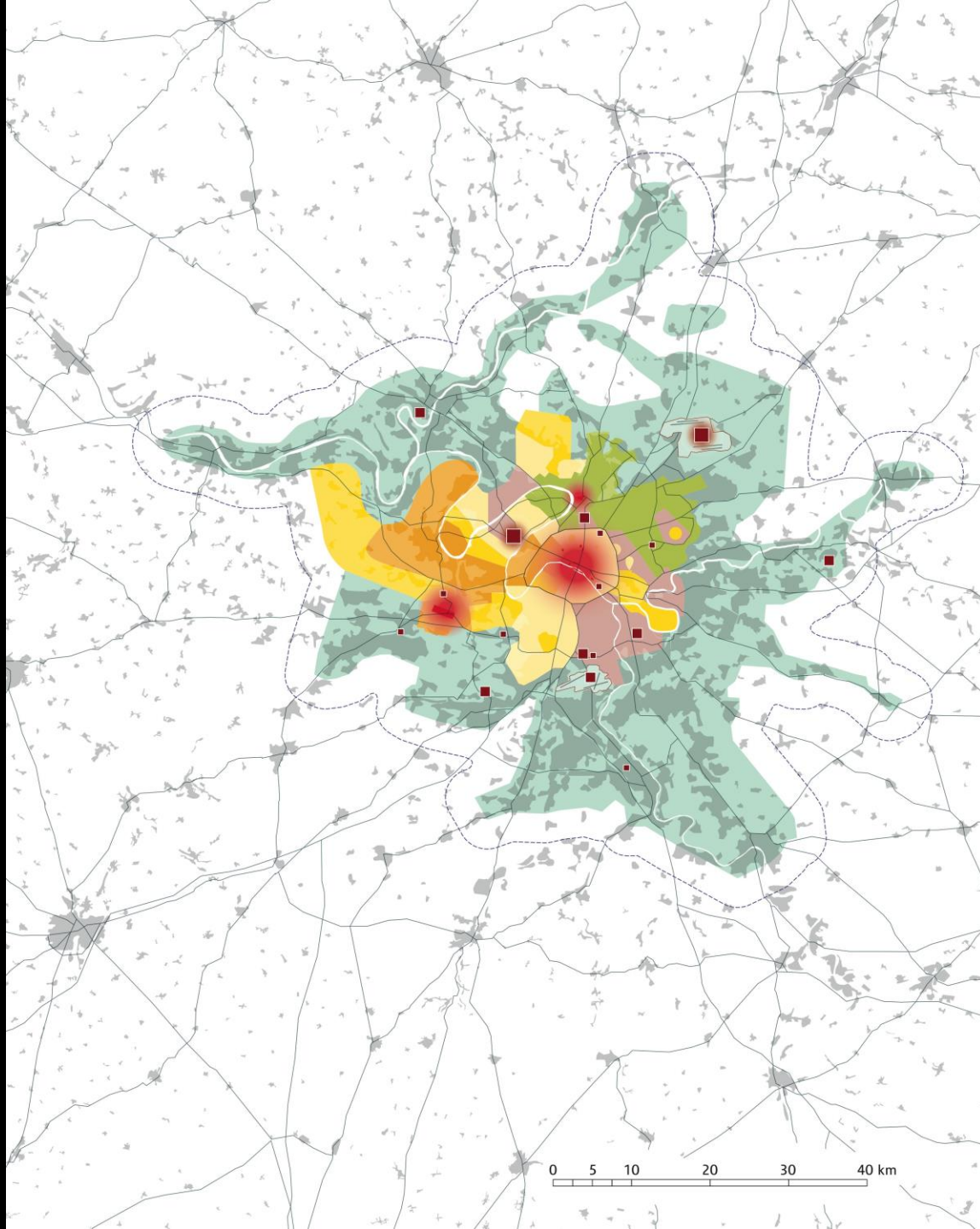
— Administrative boundaries

— Highways

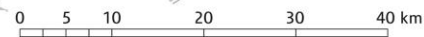
— Roads

— Railway

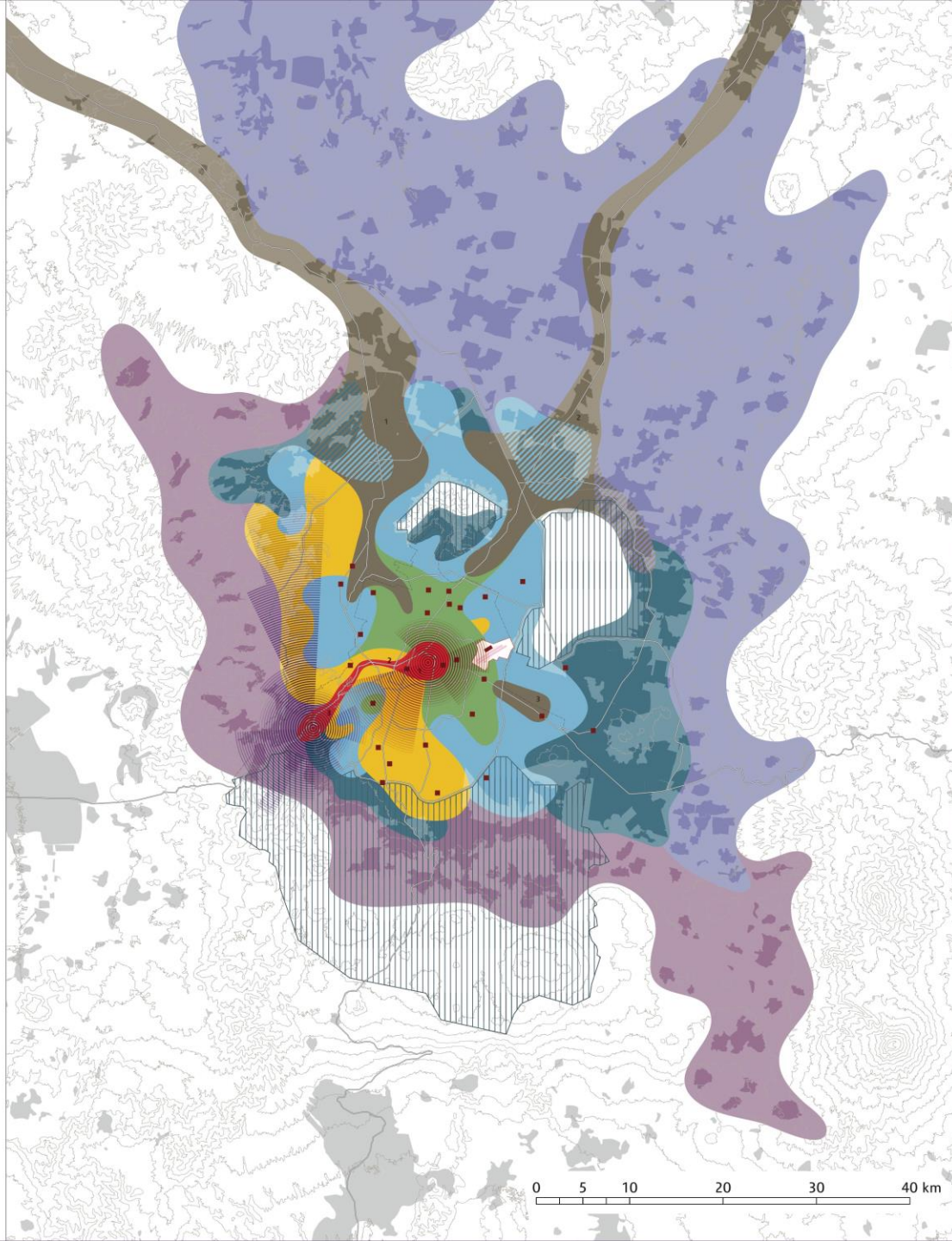




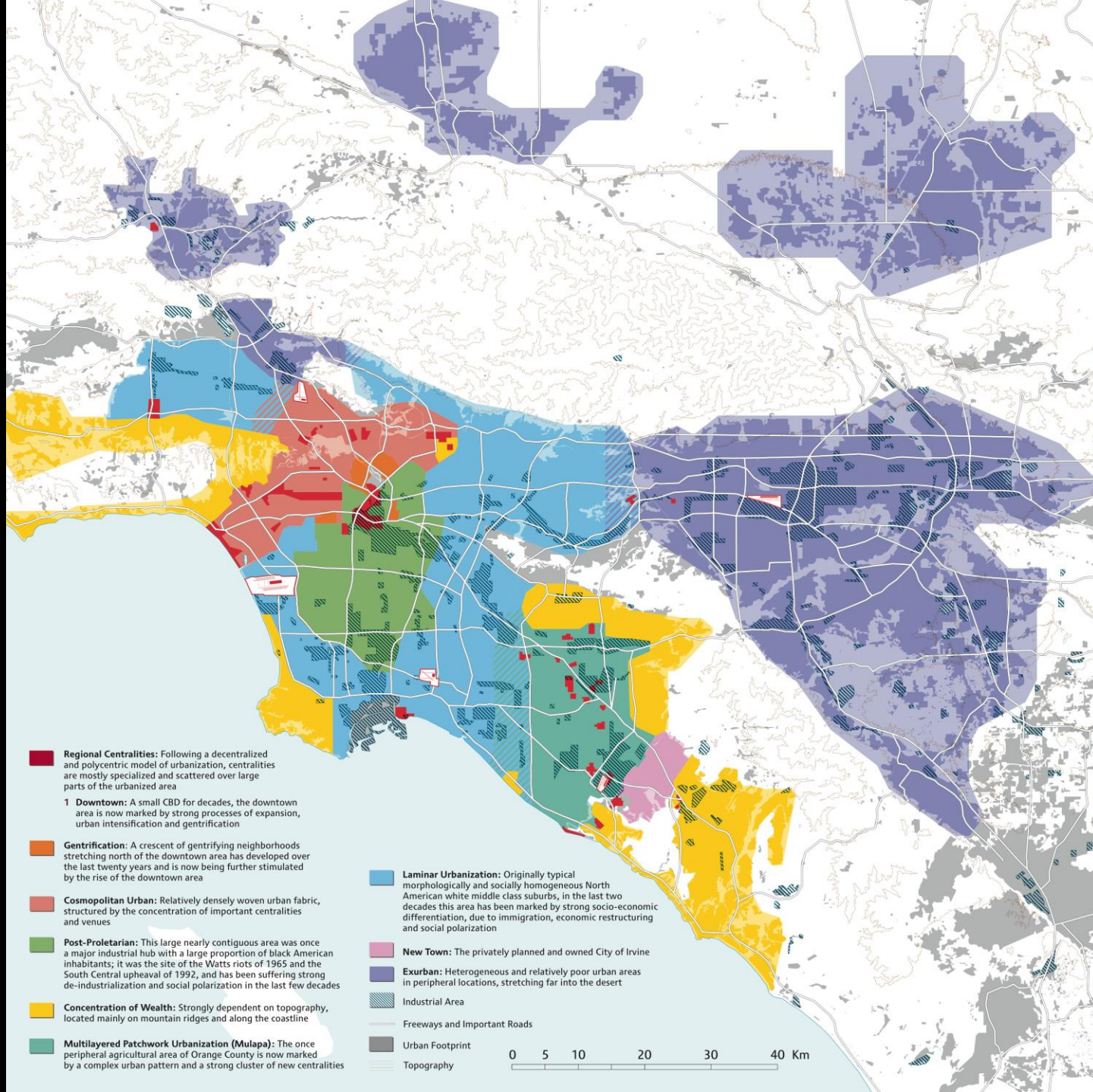
- Main Regional Centralities:** Paris and St. Denis have been structuring the region since the 12th century, Versailles since the 17th century
- Specialized Regional Centralities:** Business district La Défense, new towns, malls and airports (post-war period), amusement park Eurodisney (1980s), Technopole Saclay and Plaine St. Denis (2000s)
- Diffusion of Symbolic and Economic Power of Regional Centralities**
- Concentration of Wealth:** Unfolding in classic bourgeois neighborhoods in the west of Paris, in Versailles and in formerly rural areas
- Prospering Upper Middle Class:** Long-standing process of accumulation of wealth in morphologically diverse residential areas (city neighborhoods, zones with detached houses, villages in the periphery)
- Embourgeoisement:** Long-standing process of reinvestment in neighborhoods inside and outside the City of Paris, often followed by a radical transformation of urban morphologies and residential structures
- Metropolitan Heterogeneity:** Transformation of parts of the former "red belt" around the city of Paris, leading to a more pronounced social, functional, and morphological heterogeneity; due to the high proportion of social housing these neighborhoods resist rapid embourgeoisement
- Post-Proletarian:** Concentration of poverty in the fragmented and heterogeneous urban fabric of the northern and western parts of the "red belt" around the City of Paris
- Multilayered Patchwork Urbanization:** Large-scale process of urban restructuring resulting in a patchwork of urban fragments with very different histories, dynamics, logics, and functions
- Peri-urbanisation:** Continuous growth of low-density residential areas in peripheral zones that are strongly dependent on the main centralities of Paris
- Urban Footprint**



- **Main Regional Centralities:** Production of urban centralities on a metropolitan scale
  - 1 Centro
  - 2 Reforma
  - 3 Santa Fe
- **Specialized Centralities**
- **Ejes Industriales:** De- and Re-Industrialization
  - 1 Eje Tlalnepantla/Cuatitlan/Vallejo
  - 2 Eje Xalostoc
  - 3 Eje Iztapalapa
- **Barrios Populares:** Transformation processes of central post-proletarian and industrial neighborhoods pushed by an active re-densification policy
- **Urbanizacion Popular Consolidada:** Consolidated self-built territories
- **Urbanizacion Popular:** Self-building on subdivided plots
- **Pueblos Industrializados:** Peri-urbanization and sprawl of serial mass housing
- **Pueblos Urbanizados:** Urbanization of mainly self-administrated villages in ecological preservation zones
- **Zonas Residenciales:** Speculative, fragmented and densifying urbanization
- **Efecto Santa Fe:** Production of discontinuous territories induced by new centralities
- **Efecto Centro:** Incorporation of differences induced by the urban regeneration of the historic center
- Zones of Restriction:** Urban development is formally restricted
- Airport**
- City Limits:** Administrative border of Distrito Federal
- Topography**
- Main Strategic Roads**
- Urban Footprint**



0 5 10 20 30 40 km



**Regional Centralities:** Following a decentralized and polycentric model of urbanization, centralities are mostly specialized and scattered over large parts of the urbanized area

**1 Downtown:** A small CBD for decades, the downtown area is now marked by strong processes of expansion, urban intensification and gentrification

**Gentrification:** A crescent of gentrifying neighborhoods stretching north of the downtown area has developed over the last twenty years and is now being further stimulated by the rise of the downtown area

**Cosmopolitan Urban:** Relatively densely woven urban fabric, structured by the concentration of important centralities and venues

**Post-Proletarian:** This large nearly contiguous area was once a major industrial hub with a large proportion of black American inhabitants; it was the site of the Watts riots of 1965 and the South Central upheaval of 1992, and has been suffering strong de-industrialization and social polarization in the last few decades

**Concentration of Wealth:** Strongly dependent on topography, located mainly on mountain ridges and along the coastline

**Multilayered Patchwork Urbanization (Mulapa):** The once peripheral agricultural area of Orange County is now marked by a complex urban pattern and a strong cluster of new centralities

**Laminar Urbanization:** Originally typical morphologically and socially homogeneous North American white middle class suburbs, in the last two decades this area has been marked by strong socio-economic differentiation, due to immigration, economic restructuring and social polarization

**New Town:** The privately planned and owned City of Irvine

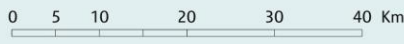
**Exurban:** Heterogeneous and relatively poor urban areas in peripheral locations, stretching far into the desert

**Industrial Area**

**Freeways and Important Roads**

**Urban Footprint**

**Topography**





# processes of urbanization (established)

- suburbanization
- post-suburbanization
- periurbanization
- gentrification
- urban regeneration
- urban renewal
- urban restructuring
- informal urbanism
- ...

# processes of urbanization: comparative categories

- development of old and new centralities
- incorporation of urban differences
- popular urbanization
- plotting urbanism
- mass housing production
- bypass urbanism
- industrial urbanization
- laminar urbanization
- multilayered patchwork urbanization

# Towards a new vocabulary of urbanization

Schmid, Christian et al. (2018): Towards a new vocabulary of urbanisation processes: A comparative approach. *Urban Studies* 55/1, 19-52