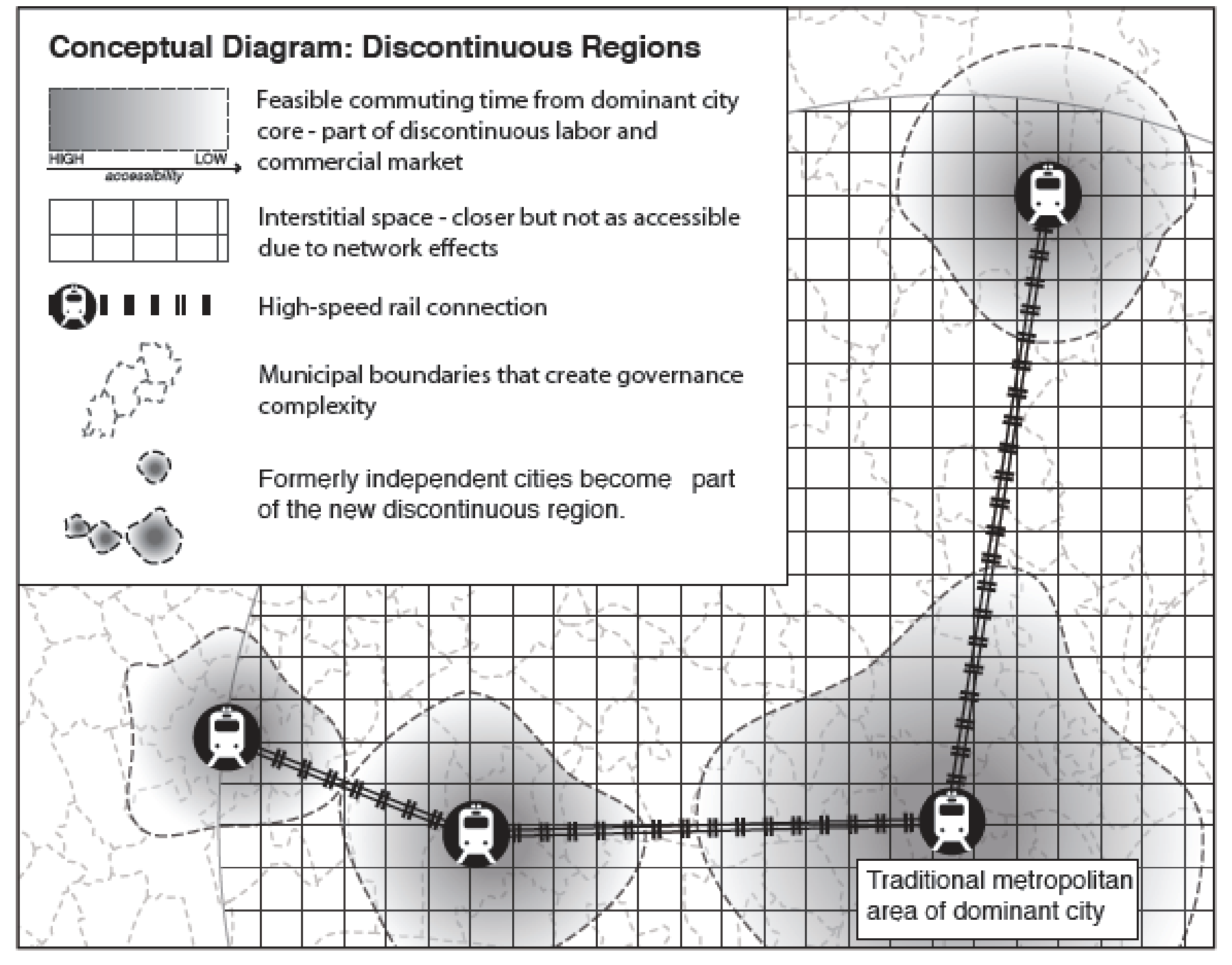
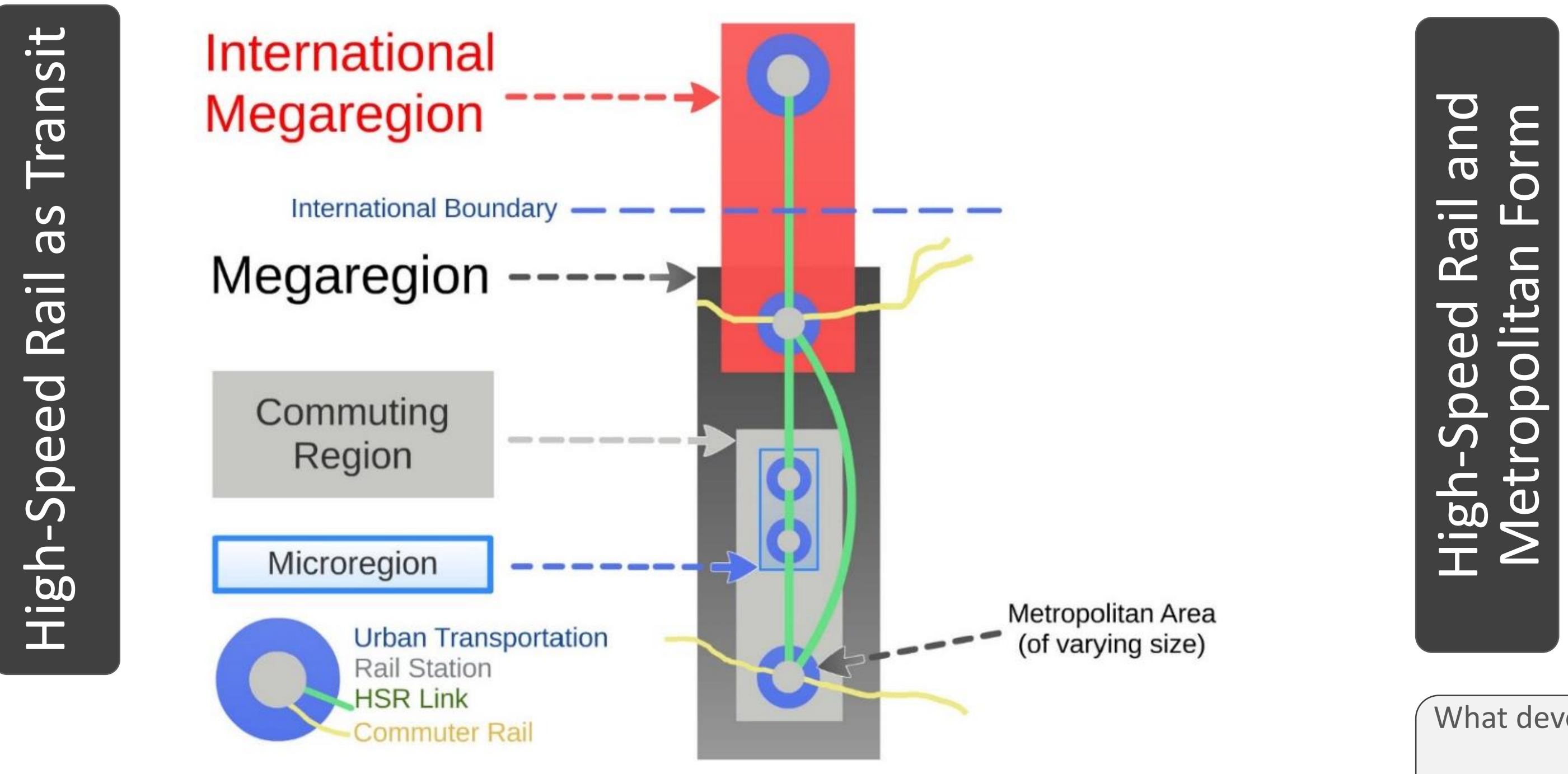


HSR as Transit: The continuing transportation-driven evolution of metropolitan form

Ryan J. Westrom and Joseph M. Sussman



Ed Glaeser: "Transportation technologies have always determined urban form."



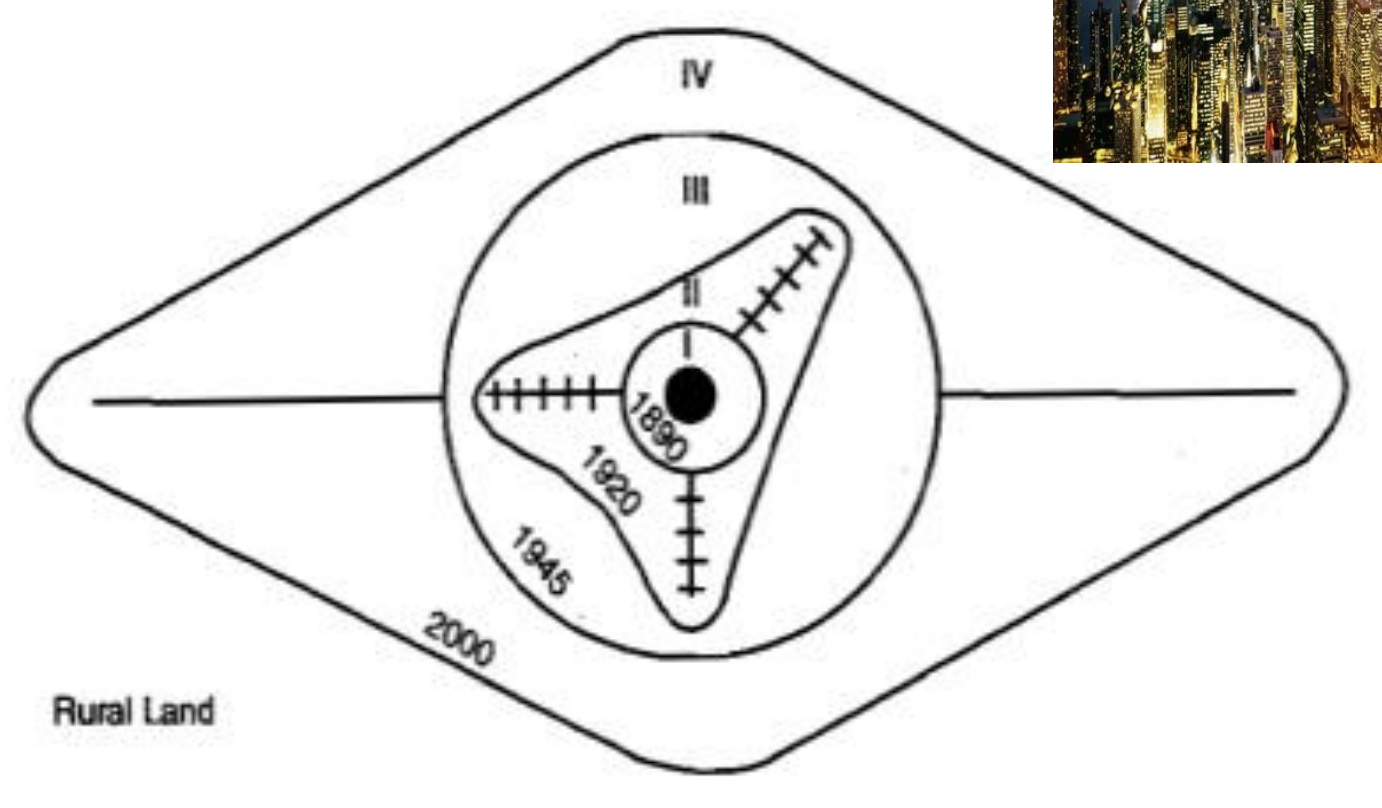
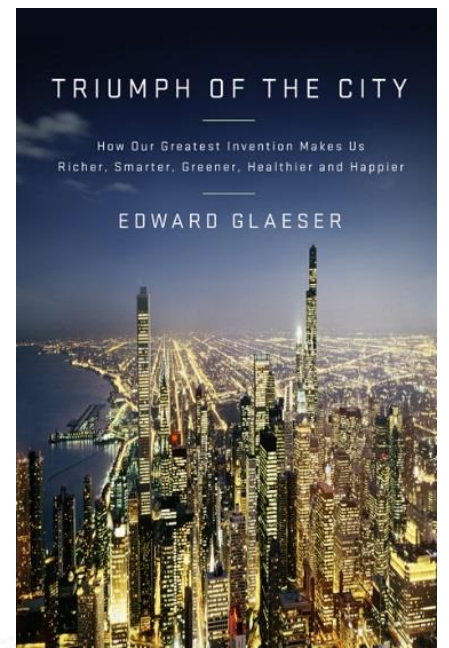
Quality of Life and HSR

HSR as a transportation network fits well the design form of communities aspiring to be livable communities.



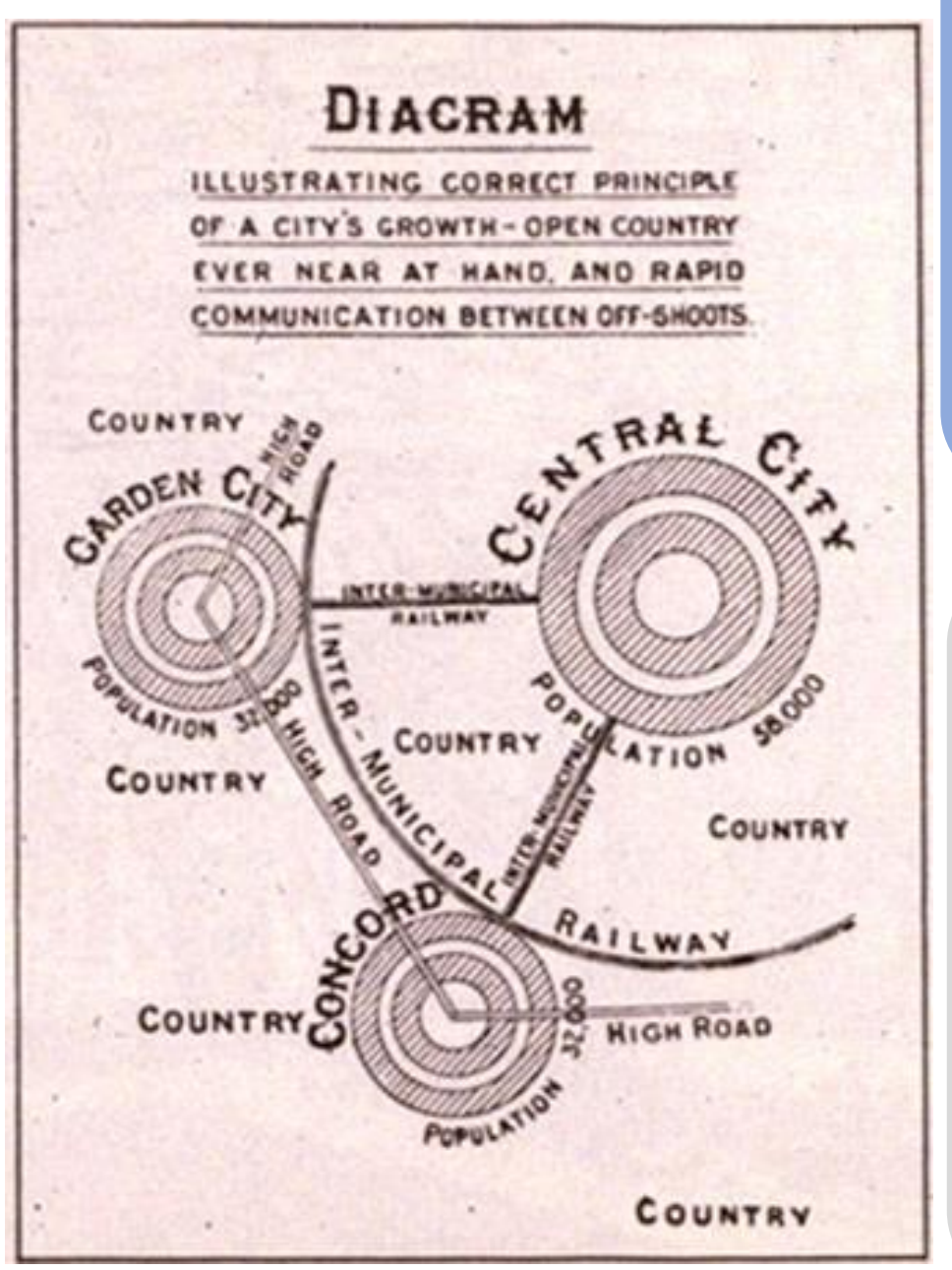
Learning From Case Communities

The Rise of Urbanization: Transportation and Metropolitan Form



Intrurban transport eras and metropolitan growth patterns: (I) Walking-Horsecar Era, (II) Electric Streetcar Era, (III) Recreational Auto Era, and (IV) Freeway Era. Source: Adams (1970, p. 56). Copyright 1970 by The Association of American Geographers. Adapted by permission.

Technology	Approximate date introduced	Typical door-to-door speed (mph)	Travel time per mile (minutes)
Walking	Early	3	20
Horse-drawn omnibus	1827	4	15
Horse-drawn streetcar	1835	5	12
Cable car	1875	8	7.5
Electric streetcar	1890	10	6
Rail rapid transit	1910	15	4
Motor bus	1915	20	3
Automobile	1920	30	2
High-speed rail	1964	120	0.5



- What development styles is HSR conducive to?
- 21st Century Garden Cities?
 - Transit-Oriented Development
 - New Urbanism

A closer look at four case cities home to potential future HSR systems—Coimbra and Leiria in Portugal and Champaign-Urbana and Kankakee in Illinois within the U.S.A.—that will move within a principal city's commuting reach—Lisbon and Chicago, respectively.



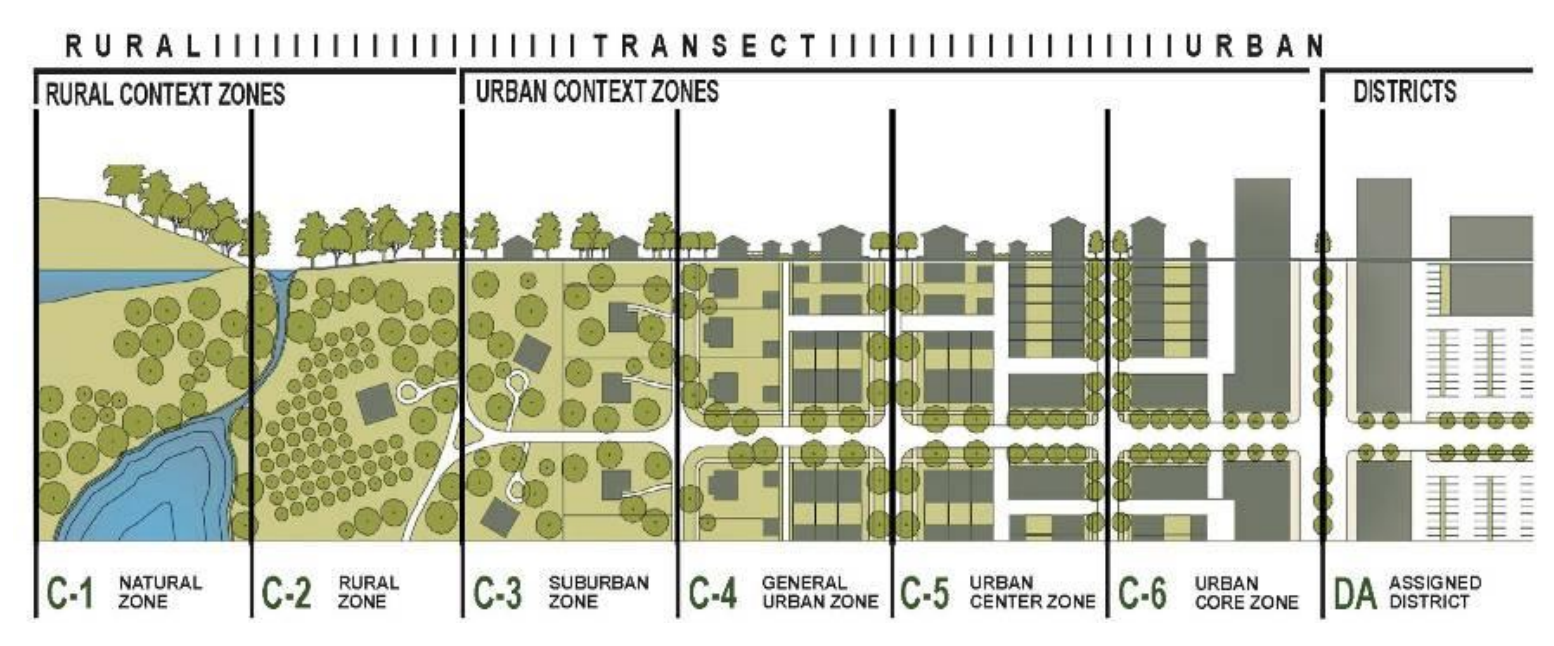
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Concluding Thoughts



1. HSR Will Affect Metropolitan Form
 Scottish biologist Patrick Geddes introduced the idea of a regional transect that suggests each place in a region is dependent on the others, and the city on the hinterlands. He stated, "In short, it takes the whole region to make the city."
 An added HSR link that reinforces these symbiotic relationships will support the development essential to continued metropolitan growth, and can transform the planning perspective leaders take. HSR links will transform the existing metropolitan form, and also allow for new growth via the linked communities in newly discontinuous functional metropolitan areas.



2. HSR Alone Will Not Bring Change
 "High-speed rail's integration with local land use and mobility systems is critical if HSR is to be successful in supporting network-based agglomeration economies." —Naomi Stein
 In the end, we do not invest in infrastructure as an end in itself. We do it for the benefits it brings, and with the benefits shown for these HSR systems, planners must accommodate this investment in a fashion that further leverages its potential.