

Primacy

CHRISTOF PARNREITER
University of Hamburg, Germany

The term and concept of urban primacy were introduced by US geographer Mark Jefferson in the late 1930s. Interested in cities, their size and distribution, he compared the population size of the largest with that of the second largest city in 51 countries, which he considered to be the leading and culturally most advanced. He found that in 28 cases the largest city had more than twice the population than the second largest city, while in 18 countries the largest city was more than three times as large as the second. For Jefferson (1939, 227, 231), this “constancy of recurrence ... gives this relation the status of law. ... A country’s leading city is always disproportionately large and exceptionally expressive of national capacity and feeling.” Yet, beyond the descriptive definition – a primate city is at least twice as large as the second largest city – Jefferson (1939, 227) suggested that primacy was a sign as well as a result of development: “All over the world it is the Law of the Capitals that the largest city shall be supereminent, and not merely in size, but in national influence.” According to Jefferson (1939, 226), this close relationship between size and grandeur was universal – London is the United Kingdom’s primate city because “there fame and fortune are found,” while Mexico City is the “culmination of national life.”

Though, soon after Jefferson’s publication, Zipf’s (1941) work on city size in the USA suggested that leading nations might have a balanced urban system, it took nearly two decades before research on primacy gained

momentum. In this time, however, an essential feature of Jefferson’s contentions was lost, namely the notion that urban primacy is “good.” Instead, the idea of poor countries’ overurbanization became popular, and with it the belief that primate cities are barriers to national development. Hoselitz, for example, in his famous distinction between generative and parasitic cities claimed that primate cities’ growth was at the expense of all other cities, for which reason “a series of at least temporary parasitic influences [are] exerted by the primate city” (1955, 294). The notion that the primate city was in all respects – population, infrastructure, economy – too large in relation to all other cities of a country was further popularized by a then well-accepted United Nations report on urbanization in Asia, which stated that the “primate or great city ... tend[s] to be parasitic in relation to the remainder of the national economy” (Hauser 1957, 34). Primacy, thus, became closely related to “underdevelopment” – as its consequence (e.g., resulting from colonialism), but increasingly also as one of its reasons. According to this view, an unbalanced urban network hinders the diffusion of economic progress, resulting in overall lower levels of development and polarization.

Yet, such views were soon challenged. On the one hand, many studies rejected Zipf’s law, finding that the log-normal city-size distribution of cities is actually not the norm. On the other hand, doubts were raised as regards the assumed association of primacy and underdevelopment. Brian Berry (1961, 587) was one of the first to contend that there are “no relationships between type of city size distribution and either relative economic development or the degree of urbanization

of countries.” Other studies either supported this finding (e.g., Mehta 1964), found only a weak negative statistical association between per capita income and primacy (Linsky 1965), or observed an inverted U-shaped curvilinear relationship, according to which primacy is functional for the development process, while the urban system of fully developed economies is expected to take a log-normal form (El-Shakhs 1972).

These doubts did, however, little harm to the popularity of the assertion that primacy is adverse to economic growth. A good example for this contradiction between claims and empirical support is Berry (1964), who, only three years after finding no relationships between primacy and economic development and without presenting new evidence, links nonprimate urban systems in rank-size form to normal, “healthy” development processes. Until today, this is a commonsensical truism in the “Third World” cities literature.

The pervasiveness of this discourse stems, first, from developmentalism and modernization theory, which successfully had established the West/North and, in particular, the USA as role models. Pursuing the prescribed economic and political strategies would lead, it was claimed, to growth, welfare, and to regional convergence and a balanced urban system. Second, and related, the popularity of the “primacy is equal to underdevelopment” discourse is attached to the overpopulation alarmism which emerged in the 1940s. Decolonialization, mortality reduction, and hence population growth in the recent or soon independent states and growing awareness of this demographic change nourished “the white man’s” fear of losing control and becoming a minority. The temporal parallelism of the overurbanization and the overpopulation alarmism is striking, and so are personal intersections. Kingsley Davis, for example, one of the “fathers” of the model of the demographic transition,

was also key in introducing the concept of overurbanization (Davis and Golden 1954). Such coincidences are not accidental: where, if not in the rapidly growing cities of the “Third World,” should one envisage overpopulation? And while modernization theory promised development as *the* answer to the general overpopulation “problem,” achieving a log-normal distribution of urban settlements was thought to be the solution to the spatial correlate of the “problem,” the primate city, which ever more often became a megacity. An increasing research emphasis was thus laid on intermediate cities and on policies to stimulate their growth (Hardoy and Satterthwaite 1986).

A third driver of the primacy discourse was the quantitative revolution. With geography being interpreted as spatial science, the search for laws, rules, or at least regularities of social “things” (such as cities) “in” space became the common task. The rank-size rule, tested with ever-increasing amounts of data and increasingly sophisticated statistical methods, fitted this program perfectly, though the results of these quantitative endeavors remained inconclusive.

In the 1970s and 1980s, the influence of Marxism and world-systems analysis on urban studies revived the debate on primacy. Frank (1969), though not referring explicitly to the primacy debate, suggested that peripheral areas will develop very dominant cities which monopolize external relations in order to funnel resources from rural and urban hinterlands to the foreign centers. Primacy was, thus, seen as a result of dependent urbanization which does not allow for the development of or breaks an already existing “urban network of functional interdependences” (Castells 1977, 48). Yet, despite promising beginnings (e.g., Timberlake 1985), critical research on urban primacy did not produce new insights. Smith (1985, 89) even contended that scholars

Table 1 Demographic primacy, Mexico City, 1980–2010 (based on Instituto Nacional de Estadística y Geografía 2016; World Bank 2016)

	1980	1990	2000	2010
Primacy index	8.2	5.2	5.0	4.5
Mexico City's share in the country's total population (percent)	18.8	18.3	18.0	17.0
Mexico City's share in the country's urban population (percent)	28.3	25.6	24.0	21.8

Primacy index is defined as the relation of Mexico City's population to the second largest city's population. Mexico City means the whole urban agglomeration (Zona Metropolitana de la Ciudad de México).

Table 2 Functional primacy, Mexico City, 1998–2014 (based on Instituto Nacional de Estadística y Geografía 2016; World Bank 2016)

	1998	2004	2009	2014
Mexico City's share in the country's manufacturing value added (percent)	22.7	17.3	16.9	13.6
Mexico City's share in the country's financial and insurance services value added (percent)	87.1	88.2	93.1	81.6

interested in dependency and modernization theorists differed little, agreeing on primacy's "ugly" nature as well as on accounts of its emergence, though none of the established explanations was convincing. While the idea that primacy resulted from colonialism fitted Asian but not Latin American cases well, the export dependency thesis could not explain why in Latin America primacy grew particularly in the time of import substituting industrialization. Nevertheless, neither Marxist nor world-systems analysis scholars could establish an alternative theoretical explication.

There is, however, one critical contribution of world-systems analysis to the study of primacy. Following Wallerstein's problematizing of social sciences' methodological nationalism, it has been criticized that the study of primacy has generally been placed within national territories, assuming thereby that systems of cities are contained within (and end at) the boundaries of nation-states (Walters 1985). Yet, many, if not all cities belong to more than one system of interactions, in which the units do not necessarily

lie in the same state. In order to accomplish the funneling of resources of the Spanish viceroyalty to Spain, and to bridge the emerging world economy of the Mediterranean to Asia, colonial Mexico City was part of several overlapping urban systems. It connected cities in the Spanish viceroyalty via Veracruz and Seville to Madrid, and it linked the Spanish capital via Manila to Shanghai. In other cases, large countries (e.g., India) might have (had) more than one urban system. However, the call to seriously consider what constitutes an urban system, and at which scale, *before* making statements about the origins and effects of primacy, went by and large unheeded – in most primacy studies, the nation-state remained the unquestioned unity. Nevertheless, reflections on the appropriate unit of analysis are more urgent than ever: while intercity relations are increasingly multiscale, with a considerable number of cities being directly or indirectly interlocked in a world city network (Taylor and Derudder 2015), what sense does it make to exclusively consider the national scale?

This brings me to the next challenge: what is the apt subject for defining primacy? For Jefferson it was population, though one can assume that his choice might also have been dictated by the availability of data. Given the overall thrust of the debate on primate cities and development, it is reasonable to ask whether population is really the proper indicator. Is it gross domestic product (GDP), value added in manufacturing or producer services? Is it a combination and, if so, how to weight the indicators? Results on whether a city is primate or not differ greatly according to the indicators chosen. In Mexico City, for example, demographic primacy has been constantly declining since the 1980s, while as regards economic primacy the results are much less clear. Though Mexico City's share in the national GDP and in manufacturing has declined sharply since 1980, producer services and in particular financial services show a quite different trajectory (Tables 1 and 2). Thus, while "material" production has become more evenly distributed among Mexican cities, economic management and governance are extremely centralized (Parnreiter 2010). What does it mean, then, to speak of declining primacy?

In current urban geography and sociology primacy is not presented as an important research topic – many textbooks, for example, do not even mention it. In urban and regional economics, however, there are some attempts to uncover both determinants of urban primacy and its effects on national economic growth by modeling approaches (e.g., Krugman and Livas Elizondo 1996; Henderson 2003). Yet, the main questions that center on urban primacy remain unanswered, as Short and Pinet-Peralta (2009, 1254) have recently summarized: "Low-income countries exhibit both high and low values of primacy. High primacy is associated with countries with colonial and non-colonial histories; in large and small countries; in

rich and poor countries; and in politically unstable and politically stable countries."

Does it make any sense to revive the debate on primacy? Certainly not in the traditional way, which has correctly been criticized for "elevating empirical description into causal explanation" (Smith 1987, 288). Nor is it useful to search for the optimal city size, simply because the geographical and historical diversity of relationships between urbanization patterns and development tells us that such a thing does not exist. Nevertheless, claiming that the real conflict of material interests in poor countries "is not spatial" (Smith 1987, 287), for which reason examinations of geographical formations such as urban systems are pointless, is throwing the baby out with the bathwater. If urban primacy is not essentialized into the violation of a law, but comprehended as a social phenomenon within a specific geographical and historical setting, its analysis can inform about the particular patterning of the division of labor and a city's position in it. In this view, investigating primacy implies scrutinizing the geographies of investment, trade, or migrations *and* their meaning. This would be, in a nutshell, part of the study of intercity relations and properties.

Though high primacy is by definition spatially uneven development, an examination of the extent to which this implies conflicts or problems (and which ones) will have no ready-made answers. *All* cities are, as historians know well, based on inequality: they are the outcome of uneven development, resulting from an outflow of resources from rural areas and smaller towns and cities and their subsequent geographic concentration. Historically, however, the city has multiplied these resources and given back a (smaller) part to the country and the smaller cities. Though the mutual benefit, assumed by Adam Smith, is therefore distributed fairly unevenly, economic growth and social

progress spread out of the city. Gonzalez Casanova (1965) has aptly called this ambiguity “internal colonialism and national development.” In a similar vein, Harvey (1993, 309) conceptualizes urban systems as “giant man-made resource system[s],” which serve the creation, extraction, circulation, centralization, and appropriation of surplus. In such a view city size and size ratio per se are unrelated to growth and development. The burning issue as regards the relationship between urbanization and development is not whether a city is too big but rather what “it” (meaning its elites) does with the surplus. Interestingly enough, Harvey, who does not mention the primacy debate, refers in that context to Hoselitz’s distinction between generative and parasitic cities. While in the latter case the extracted surplus goes to “a non-working and all-consuming urban elite” (1993, 234), the generative city’s elite will invest a significant part of the surplus in order to enlarge production. The real issue regarding the relationship between urbanization and development is therefore not a demographic or economic size ratio per se, but a political one: are the urban elites willing and able to “put surplus value back into circulation in such a way that the city functions as a ‘growth pole’ for the surrounding country” (pp. 249–250)?

Such questions are, though in another terminology, omnipresent in today’s research on financialization, its geographies, and the inequalities it engenders. Showing a high concentration of financial and other producer services, global cities meet, as you might say, primacy functions at a global level. Making such cities to “obligatory passage points under financialized globalization” (Bassens and van Meeteren 2015, 758), professional elites in global cities appropriate an ever-growing share of the value created along commodity chains. This deepens inequalities at various

scales: the urban, the regional, the national, and the global.

If primacy research has a future, it is in this context: do city size and size ratio relate to the monopolization of resources and key functions, and with what consequences? Is primacy the result of or even promoting the rent-seeking behavior of urban elites? Though such questions have been raised, systematic research on such questions under contemporary conditions is still pending. Moreover, the scale of analysis has to be discussed – what is the “surrounding country” (or, more aptly, the catchment area) for which a city should function as a growth pole (or, conversely, out of which it sucks resources)? Finally, primacy of *what* has to be defined. If the interest is in uneven development, than economic and political functions related to its production and reproduction have to be distinguished. Producer and, in particular, financial and legal services have been named in that context as key instruments for the governance of production networks in a way that allows for an increasingly unequal distribution of the value added.

SEE ALSO: Cities in Developing Countries; Global City; Megacity; Mexico City; Overurbanization; Spatial Inequality; Uneven Economic Development; Urban Poverty

REFERENCES

- Bassens, D., and M. van Meeteren. 2015. “World Cities under Conditions of Financialized Globalization: Towards an Augmented World City Hypothesis.” *Progress in Human Geography*, 39: 752–775.
- Berry, B. J. L. 1961. “City Size Distribution and Economic Development.” *Economic Development and Cultural Change*, 9(4): 573–587.
- Berry, B. J. L. 1964. “Cities as Systems within Systems of Cities.” *Papers of the Regional Science Association*, 13(1): 146–163.
- Castells, M. 1977. *The Urban Question: A Marxist Approach*. London: Edward Arnold.

- Davis, K., and H. H. Golden. 1954. "Urbanization and the Development of Pre-Industrial Areas." *Economic Development and Cultural Change*, 3(1): 6–26.
- El-Shakhs, S. 1972. "Development, Primacy, and Systems of Cities." *Journal of Developing Areas*, 7(1): 11–36.
- Frank, A. G. 1969. *Latin America: Underdevelopment or Revolution? Essays on the Development of Underdevelopment and the Immediate Enemy*. New York, NY: Monthly Review Press.
- Gonzalez Casanova, P. 1965. "Internal Colonialism and National Development." *Studies in Comparative International Development*, 1(4): 27–37.
- Hardoy, J. E., and D. Satterthwaite. 1986. "Government Policies and Small and Intermediate Urban Centres." In *Small and Intermediate Urban Centres: Their Role in National and Regional Development in the Third World*, edited by J. Hardoy and D. Satterthwaite, 335–397. London: Hodder & Stoughton.
- Harvey, D. 1993. *Social Justice and the City*, rev. ed. Oxford: Blackwell.
- Hauser, P. M. 1957. *Urbanization in Asia and the Far East*. Calcutta: UNESCO.
- Henderson, V. J. 2003. "The Urbanization Process and Economic Growth: The So-What Question." *Journal of Economic Growth*, 8: 47–71.
- Hoselitz, B. F. 1955. "Generative and Parasitic Cities." *Economic Development and Cultural Change*, 3(3): 278–294.
- Instituto Nacional de Estadística y Geografía (INEGI). Accessed January 10, 2018, at <http://www.inegi.org.mx/>.
- Jefferson, M. 1939. "The Law of the Primate City." *Geographical Review*, 29(2): 226–232.
- Krugman, P., and R. L. Elizondo. 1996. "Trade Policy and the Third World Metropolis." *Journal of Development Economics*, 49: 137–150.
- Linsky, A. S. 1965. "Some Generalizations concerning Primate Cities." *Annals of the Association of American Geographers*, 55(3): 506–513.
- Mehta, S. K. 1964. "Some Demographic and Economic Correlates of Primate Cities: A Case for Reevaluation." *Demography*, 1(1): 136–147.
- Parnreiter, C. 2010. "Global Cities in Global Commodity Chains: Exploring the Role of Mexico City in the Geography of Governance of the World Economy." *Global Networks*, 10: 35–53.
- Short, J. R., and L. M. Pinet-Peralta. 2009. "Urban Primacy: Reopening the Debate." *Geography Compass*, 3(3): 1245–1266.
- Smith, C. A. 1985. "Theories and Measures of Urban Primacy: A Critique." In *Urbanization in the World-Economy*, edited by M. Timberlake, 87–117. Orlando, FL: Academic Press.
- Smith, D. A. 1987. "Overurbanization Reconceptualized: A Political Economy of the World-System Approach." *Urban Affairs Quarterly*, 23(2): 270–294.
- Taylor, P. J., and B. Derudder. 2015. *World City Network: A Global Urban Analysis*. London: Taylor & Francis.
- Timberlake, M., ed. 1985. *Urbanization in the World-Economy*. Orlando: Academic Press.
- Walters, P. B. 1985. "Systems of Cities and Urban Primacy: Problems of Definition and Measurement." In *Urbanization in the World-Economy*, edited by M. Timberlake, 63–85. Orlando, FL: Academic Press.
- World Bank. 2016. "World Development Indicators." Accessed January 10, 2018, at <http://databank.worldbank.org/data/reports.aspx?source=world-development-indicators>.
- Zipf, G. K. 1941. *National Unity and Disunity*. Bloomington, IN: Principia Press.