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A Note on Rank-Size and Primacy: In Pursuit of a Parsimonious Explanation

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This note seeks to forward new statements, and foregoes documentation of the literature on primacy and rank-size in recognition of the existing comprehensive reviews (e.g., Berry and Kasarda, 1977; Dziewonski, 1972; Ettlinger, 1981; Rosing, 1966; Sheppard, 1982). Briefly stated, rank-size and primacy represent types of settlement systems that are characterized by balanced and imbalanced distributions of settlement sizes, respectively. Development economists and geographers, particularly during the 1960s, drew a number of conclusions based on extensive empirical research regarding the structure of settlement systems and levels of economic development. Second, they contended that primacy and rank-size occur at two ends of a developmental continuum. As a corollary to this second point, this continuum was thought to be evolutionary, implying that primacy in regions or nations will inevitably change to the point that a rank-size situation obtains.

This set of ideas, together with empirically documented rebuttals, appeared in the literature throughout the 1960s and into the 1970s, but has waned in recent years. Counterclaims refuted the economic development thesis but provided no explanation of the observed settlement patterns. More recently, critical reviews of the economic development thesis have appeared that provide some framework for understanding what the observed patterns signify (e.g., Ettlinger, 1981; Sheppard, 1982). Specifically, the static rank-size and primacy models are considered invalid in a dynamic world of urban growth and decline that is a reflection of inter-urban linkages and patterns of dominance and dependence. Still a parsimonious explanation for the existence of rank-size and primate settlement distributions is wanting.

It is suggested here that balanced and imbalanced distributions of settlement sizes reflect centralization and decentralization, respectively, of a nation's political economy. The centralization of financial and material capital tends to correspond with the centralization of population (reflecting primacy), and furthermore, this correlation often corresponds to centralized government and high government intervention in the private economic sector. For example, Great Britain, Japan, and the Soviet Union are all characterized by relatively high levels of economic development, and all have settlement distributions far removed from a rank-size pattern. The common denominator among these nations is the high degree of government intervention in the private sector and centralization of political and economic interests. The settlement distribution in the United States, although always changing (Borchert, 1972; Burns and Van Ness, 1981; Muller, 1977), has not approached the degree of primacy that has characterized Great Britain, Japan, and the Soviet Union. Although the United States is a mixed economy, a tradition of Federalism has meant that the relative degree of both government intervention and centralization is low (Choguill, 1977).

Proponents of the economic development thesis are for the most part correct in characterizing underdeveloped nations by a primate pattern, but for the wrong reasons. Less developed countries generally tend toward primacy because they are

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essentially economies that have been planned economically and politically under colonial regimes (Johnston, 1977). Such regimes were highly centralized in export oriented capital cities. Centralization, effecting a primate pattern, emerged in underdeveloped nations just as it did in many advanced economies; the principal difference is that centralization in colonized areas was externally created and controlled (Amin, 1974). Moreover, these less developed host countries continue to be centralized under the wing of neo-colonialism through the activities of transnational corporations (Rogerson, 1980). Underdeveloped nations and advanced economies represent ends of a socio-economic and political continuum, between which occur such nations as Canada. Canada's tendencies toward primacy are not so much a function of either colonization or intra-national centralization of governmental organization as it is a function of economic centralization that is associated with a preponderance of spatially concentrated foreign investments (Semple and Smith, 1981).

To associate highly developed nations with a rank-size pattern because less developed nations generally are associated with a primate pattern, and vice versa, is to misconstrue complex economic processes. Settlement distributions are clearly inappropriate correlates of levels of economic development. More importantly, levels of economic development do not depend exclusively on spatial patterns, since a pattern may represent any one of a number of processes. It may be more fruitful to delimit the range of processes that may be associated with various settlement patterns (Sheppard, 1982).

Primate patterns, for example, will occur where political and especially economic centralization is present. Centralization may occur as a consequence of concerted planning; it may be a reflection of minority control (social or racial) over a large population; or it may represent external political and/or economic dominance. While the third of these possibilities is generally associated with underdeveloped and less developed nations, the first and second possibilities can occur in a wide variety of socio-economic and political circumstances.

Tendencies toward a rank-size distribution represent decentralization that may occur as a consequence of such factors as policy, frontier settlement, or ecological homogeneity of regions within a relatively closed national system. In regard to this latter case of a closed system, substantial capital investments are likely to be made in each region of the nation if interregional trade is necessary. Although this statement appears similar to Vapnarsky's (1969) classic propositions on national closure, the conceptual framework here differs in that it is argued that levels of economic development are not implied by degrees of closure. Furthermore, a case of national closure must be considered either in a historical or hypothetical context, given the global scope of current economic systems (Cohen, 1981; Linge and Hamilton, 1981; Wallerstein, 1979). In open national systems, foreign investment is likely to occur, and would possibly induce centralization of economic interests and activity. On the other hand, although all nations are open systems to the extent that foreign investment takes place, a specific structure of domestic economic activity may induce decentralized settlement patterns (rank-size), as exemplified by the United States.

Summary

In the past decade researchers increasingly became disenchanted with models of primacy and rank-size as an explanation for the variability amongst all the empirical results remained absent. Following current urban and regional research trends, recent reviews of primacy and rank-size have dismissed the economic development thesis and have considered settlement distributions within the context of urban growth and decline and inter-urban dependencies. This latter approach is helpful in realistically understanding settlement distributions in the framework of a dynamic, capitalist world system. However, a more general and simple explanation would enhance and complement this complicated set of ideas that must draw from studies on demography, industrial organization and corporate strategies, development, and regional science. This note suggests that settlement distributions reflect centralization or decentralization of political economies, and furthermore, that the range of processes that may contribute to centralization or decentralization must be recognized to avoid a shallow interpretation of complex realities.

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