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Title: Analyzing Segregation in the Periphery of Latin American Cities Using Remote Sensing

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Summary

The urban pattern in Latin American cities has changed significantly in the last decades.

Historically, cities had a hierarchical pattern structure forming rings of development from the main square to the fringe of cities, where the poorest residents lived in the periphery. Since the 1980s, urban policies, controlled urban development, incremented the land value of the periphery, and promoted formal development in particular areas of the periphery. The new urban dynamics restrained spaces for informal settlers, who were forced to move closer to environmental risk areas or areas with limited mobility.

The research identified formal and informal settlements through satellite imagery, comparing urban growth of formal and informal settlements in Bogota, Colombia from 2002 to 2018, and Sao Paulo, Brazil from 2000 to 2017 to estimate the displacement of informal settlers. In addition, the study calculated the proximity of formal and informal settlements to hazardous environmental zones and public transportation access, respectively.

The research showed that informal settlements occupied locations with better mobility over time, and formal developments used riskier areas in the periphery of Bogota and Sao Paulo. The results contradict to previous studies which found that informal settlements are located in the disadvantageous locations in the city. However, the study found specific locations in which formal development constrain informal settlements.