From extractive enclaves to livable cities. The impact of extractivism on the urban quality of life in the main cities of the Peruvian Amazon in the 21st century.

The Amazon, as the epicenter of South American globalization, is inserted into the global market through an extractivism model that accumulates socio-environmental tensions (Fontaine, 2006; Gudynas, 2007; Porto Goncalves, 2017; Svampa, 2019; Gómez, 2021) and in turn drives the urban growth of its cities (Wilson, Bayón y Diez, 2015: Erazo, 2017; Gonzáles Comín, 2021; Durán and Bayón, 2021). We cannot deny that "this territory is involved in a dynamic of great magnitude, devised to integrate the subcontinent into the global market through a geographical redesign" (Porto-Goncalves, 2017; Gonzáles Comín, 2018).

In the last 30 years, the main cities of the Peruvian Amazon have maintained a population growth higher than the national average (INEI, 2017). Sixty-one percent of the population of the Peruvian Amazon region lives in cities and is considered urban (Periferia, 2020). This represents 2.72 million people. In addition, as of 2017, there were 22 cities with more than 20,000 inhabitants and 3 with populations greater than 100, 000 inhabitants, being considered intermediate cities in the system of cities and towns at the national level. These data reflect the importance of addressing the urban question in the cities of the Amazon.

In this context, what impact has the extractivism growth model had on urban growth and the livability of Amazonian cities? The hypothesis proposes a causal relationship between extractivism, urban growth and quality of life, with an interdisciplinary approach between urban economics and critical geography. It uses a mixed methodology, based on the comparative analysis of cities under a system of quantitative and spatial indicators, contrasting the results qualitatively with key actors in the territorial management of the region, thus generating useful knowledge for decision making and the design of more comprehensive public policies.

The main findings are as follows. The quality of urban life in the Amazon region is linked to its urban conformation process within the framework of its economic growth as a structural model of development. Through the review of the theories of urbanization and economic growth, we can observe that extractivism drives the growth of cities but does not ensure an integral and sustainable urban development with adequate quality of life in the long term, since it generates a type of accelerated urbanization that gives rise to "cities of consumption" with a predominance of non-tradable services and little structural change. (Gollin, 2015; Jedwab et al., 2022)

Economic growth based on extractivism in the Amazon is based on the theory of comparative advantages. (Svampa, 2019; Purwono, 2022) This has led to specialization in enclave extractive activities with little local linkage and risks of reprimarization and dependency. (Quintanar, 2019). While extractivism drives urban growth through the income effect, it also generates cities of consumption without structural change that face limitations in their long-term growth due to their low diversification and innovation. (Gollin et al, 2016)

Amazonian urbanization as part of a planetary process of diffuse urban expansion requires rethinking urbanrural dichotomies. The concept of planetary urbanization accounts for urbanized conditions beyond their agglomeration zones. (Kanai, 2014; Arboleda, 2016; Monte Mor, 2021) In the Amazon, extended urbanization articulates peripheries to global urban nodes. Here, urbanization is functional to the extended reproduction of natural capital. Therefore, a multi scale approach is required to understand the spatial production of the territory.

On the other hand, urban sprawl over the countryside connects urban and rural areas. Thus, a gradient of hybrid spaces emerges that dilute strict dichotomies. Interdependencies between city and countryside are intensifying, with increasing multidirectional flows of people, goods and information. (Alexiades, 2016) The rural world is becoming multifunctional, combining agricultural and non-agricultural activities linked to urban markets. Cities depend on the peri-urban countryside for resources and food. This integration requires a territorial planning approach to management.

In order to define the quality of life in the Amazon, we must disassociate the concept of development based only on economic progress and focus on sustainability with emphasis on social equity and respect for ecological limits. (Nour, 2018) Good living includes the concepts of habitability, satisfying needs in balance with nature, and is articulated with the principles of sustainable development (Olmos, 2008; Mittal et al., 2020). Whats more, we cannot approach a full quality of life in the Amazon without the recognition and revaluation of indigenous identity and nature. This represents the greatest challenge in the face of the impacts of the development model in the context of globalization, planetary urbanization and its consequent model of urban growth.

In summary, extractivism drives urban growth in the Amazon, but conditions its sustainability by generating cities functionally articulated to the export of natural resources for the global market, without productive chains at the local scale and impacting the quality of life of its population. Quality of life acquires relevance in the midst of the phenomenon of extended and accelerated growth of Amazonian cities.

Keywords: Amazon, globalization, extractivism, livability, urban growth, Quality of Life

- Alexiades, Miguel. "La urbanización indígena en la Amazonia. Un nuevo contexto de articulación social y territorial." *Gazeta de Antropología*, June 2016. https://doi.org/10.30827/Digibug.42869.
- Arboleda, Martín. "Spaces of Extraction, Metropolitan Explosions: Planetary Urbanization and the Commodity Boom in Latin America." International Journal of Urban and Regional *Research* 40, no. 1 (January 2016): 96–112. https://doi.org/10.1111/1468-2427.12290.
- Aviles Quintanar, Diego Alberto, and Pablo Wong González. "China y el efecto de reprimarización en América Latina." 3C Empresa. Investigación y pensamiento crítico, August 23, 2019, 118–49. https://doi.org/10.17993/3cemp.2019.080339.118-149.
- Burchardt, Hans-Jürgen. "Neo-extractivismo y desarrollo: fuerzas y límites." *Revista Brasileira de Planejamento e Desenvolvimento* 6, no. 3 (October 24, 2017): 340. https://doi.org/10.3895/rbpd.v6n3.7211.
- Buu-Sao, Doris. "Enfrentarse a la industria petrolera: dependencia cotidiana y protesta en la Selva Peruana." *América Latina Hoy* 79 (August 31, 2018): 103–24. https://doi.org/10.14201/alh201879103124.
- Cabrera-Barona, Pablo, and Helena Merschdorf. "A Conceptual Urban Quality Space-Place Framework: Linking Geo-Information and Quality of Life." *Urban Science* 2, no. 3 (August 23, 2018): 73. https://doi.org/10.3390/urbansci2030073.
- Caldeira, Teresa Pr. "Peripheral Urbanization: Autoconstruction, Transversal Logics, and Politics in Cities of the Global South." *Environment and Planning D: Society and Space* 35, no. 1 (February 2017): 3–20. https://doi.org/10.1177/0263775816658479.
- Campaña, Pablo. "La mirada estatal de la Amazonia: la planificación de la selva en Brasil, Colombia, Ecuador y Perú entre 1968-1978." *Historia Crítica*, no. 88 (April 12, 2023): 93–115. https://doi.org/10.7440/histcrit88.2023.04.
- Conning, Jonathan H., and James A. Robinson. "Enclaves and Development: An Empirical Assessment." *Studies in Comparative International Development* 44, no. 4 (December 2009): 359–85. https://doi.org/10.1007/s12116-009-9052-1.
- Di Clemente, Riccardo, Emanuele Strano, and Michael Batty. "Urbanization and Economic Complexity." *Scientific Reports* 11, no. 1 (February 17, 2021): 3952. https://doi.org/10.1038/s41598-021-83238-5.
- Duranton, Gilles. Handbook of Regional and Urban Economics, Vol 5a. Boston, MA: Elsevier, 2015.
- Ellner, Steve. "Repensando el extractivismo: La dependencia, el nacionalismo de recursos y la resistencia en América Latina." *Política. Revista de Ciencia Política* 59, no. 2 (December 28, 2021): 249–78. https://doi.org/10.5354/0719-5338.2021.63890.
- Espinosa De Rivero, Oscar. "Ciudad e identidad cultural. ¿Cómo se relacionan con lo urbano los indígenas amazónicos peruanos en el siglo XXI*?" *Bulletin de l'Institut français d'études andines*, no. 38 (1) (April 1, 2009): 47–59. https://doi.org/10.4000/bifea.2799.
- Facultad Latinoamericana de Ciencias Sociales (FLACSO), Quito, Ecuador., and Javier González-Comín. "El regreso del capital al origen extractivo. Evolución de los procesos urbanos en la Amazonía norte ecuatoriana (2000-2018." *EURE* 49, no. 146 (2023). https://doi.org/10.7764/EURE.49.146.02.
- Frick, Susanne A., and Andrés Rodríguez-Pose. "Big or Small Cities? On City Size and Economic Growth." *Growth and Change* 49, no. 1 (March 2018): 4–32. https://doi.org/10.1111/grow.12232.
- Ghosh, Poulomee, and Dr P M Raval. "Determinants of Urban Quality of Life," 2018.

- Gollin, Douglas, Remi Jedwab, and Dietrich Vollrath. "Urbanization with and without Industrialization." *Journal of Economic Growth* 21, no. 1 (March 2016): 35–70. https://doi.org/10.1007/s10887-015-9121-4.
- Gudynas, Eduardo. "Más allá del nuevo extractivismo: transiciones sostenibles y alternativas al desarrollo," n d
- Jarrín Valladares, Pablo Santiago, Luis Tapia Carrillo, and Giannina Zamora. "La colonia interna vigente: transformación del territorio humano en la región amazónica del Ecuador." *Letras Verdes. Revista Latinoamericana de Estudios Socioambientales*, no. 20 (October 17, 2016): 22–43. https://doi.org/10.17141/letrasyerdes.20.2016.2063.
- Jedwab, Remi, Elena Ianchovichina, and Federico Haslop. Consumption Cities *Versus* Production Cities: *New Considerations and Evidence*. Policy Research Working Papers. The World Bank, 2022. https://doi.org/10.1596/1813-9450-10105.
- Kanai, Juan Miguel. "On the Peripheries of Planetary Urbanization: Globalizing Manaus and Its Expanding Impact." *Environment and Planning D: Society and Space* 32, no. 6 (December 2014): 1071–87. https://doi.org/10.1068/d13128p.
- Lopez Javier, Sharo Evangelina. "La producción de las ciudades de sacrificio en la Amazonia peruana: El caso de la 'Nueva Ciudad de Belén', Iquitos, Perú." *AMBIENTES: Revista de Geografia e Ecologia Política* 5, no. 1 (June 30, 2023). https://doi.org/10.48075/amb.v5i1.31009.
- Mittal, Shilpi, Jayprakash Chadchan, and Sudipta K. Mishra. "Review of Concepts, Tools and Indices for the Assessment of Urban Quality of Life." *Social Indicators Research* 149, no. 1 (May 2020): 187–214. https://doi.org/10.1007/s11205-019-02232-7.
- Monte-Mór, Roberto Luís. "8 Extended Urbanization and Settlement Patterns in Brazil: An Environmental Approach." In *Implosions /Explosions*, edited by Neil Brenner, 109–20. De Gruyter, 2021. https://doi.org/10.1515/9783868598933-009.
- Nour, Walaa. "PRINCIPLES OF URBAN QUALITY OF LIFE," 2018.
- Purwono, Rudi, Lilik Sugiharti, Rossanto Dwi Handoyo, and Miguel Angel Esquivias. "Trade Liberalization and Comparative Advantage: Evidence from Indonesia and Asian Trade Partners." *Economies* 10, no. 4 (March 25, 2022): 80. https://doi.org/10.3390/economies10040080.
- Ruth, Matthias, and Rachel S. Franklin. "Livability for All? Conceptual Limits and Practical Implications." *Applied Geography* 49 (May 2014): 18–23. https://doi.org/10.1016/j.apgeog.2013.09.018.
- Sejkora, Jiri, and Ondrej Sankot. "Comparative Advantage, Economic Structure and Growth: The Case of Senegal." *South African Journal of Economic and Management Sciences* 20, no. 1 (June 26, 2017). https://doi.org/10.4102/sajems.v20i1.1685.
- Wang, Yi, Zhuanying Miao, Yuqi Lu, and Yingming Zhu. "The Impact of Economic Development on Urban Livability: Evidence from 40 Large and Medium-Sized Cities of China." *Journal of Geographical Sciences* 33, no. 9 (September 2023): 1767–90. https://doi.org/10.1007/s11442-023-2152-4.
- Way, Henry. "Beyond the Big City: The Question of Size in Planning for Urban Sustainability." *Procedia Environmental Sciences* 36 (2016): 138–45. https://doi.org/10.1016/j.proenv.2016.09.024.