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Beyond the binary: from probable to plausible futures in dense green urbanism

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1 Introduction: the false dichotomy and the crisis of belief

As the global urban population continues to swell, city planners and policymakers face a conundrum that defines the contemporary urban age: how to reconcile the drive for high-density living with the urgent need for ecological restoration. The question guiding this collection "Can a city be dense and green?" often presupposes a trade-off, a spatial battle where concrete competes with canopy. In my years observing urban dynamics, both the most visible and the least visible, I have come to believe this framing betrays a deeper epistemological limitation. It reflects a persistent modern ontology that views the city as the domain of humans (culture/society) and the green as the intrusion of the non-human (nature) into that domain (Swyngedouw, 2004; Capek, 2010; Alves and Vidal, 2024).

However, the tension is technical, of course, but is more a crisis of what we consider plausible. It would seem absurd to many of us to imagine a future where GDP ceases to be the primary measure of urban success within 15 years, or where a high-rise district is governed not by property management firms but by a multispecies council. These scenarios feel "unbearable" or "implausible" because our current mental frameworks are deeply dependent on the *statu quo*. We are trapped in a binary logic that treats nature and the city as distinct entities, limiting our capacity to imagine truly sustainable urban futures.

This article posits that the tension between density and greening is an ontopolitical challenge (Blaser, 2013; Cadena, 2015). Ontopolitics differs from the sociology of imagination in that it does not primarily concern how futures are envisioned, but how realities are constituted (Blaser, 2010). While urban political ecology interrogates the political-economic production of socio-natures (Swyngedouw and Heynen, 2003), it often retains a shared ontology of "nature" and "society" as analytical categories. An ontopolitical approach instead foregrounds conflicts over the very existence and status of entities within urban governance, asking not merely who controls green space, but whether green space is understood as infrastructure, commons, habitat, or political subject. This ontological shift has material consequences for planning instruments, institutional design, and regulatory frameworks. The challenge, therefore, is not simply to insert plants into high-rises, which is a practice that often devolves into "greenwashing," but mostly to fundamentally reconfigure our relationship with the biosphere. We must shift from a paradigm of domination and management to one of cohabitation and resonance (Rosa, 2021), and in doing so, move from merely "probable" futures to genuinely transformative "possible" ones.

2 The limits of technocratic green urbanism types

In response to climate change, cities worldwide have adopted the language of "nature-based solutions" (NbS) and "green infrastructure" (GI) (Kabisch et al., 2016). I do not dismiss these efforts entirely; they represent a necessary first step. Yet, while these frameworks have successfully mainstreamed environmental concerns into planning, they remain largely technocratic. They tend to operationalize nature as a service provider—filtering air, reducing heat islands, or managing stormwater—essentially rendering the non-human world into a subset of municipal infrastructure (Heynen et al., 2006). This instrumental view has significant limitations. Firstly, it obscures the agency of non-human life, treating trees, waterways, and soils as passive objects to be arranged for human utility. Secondly, by quantifying nature primarily through metrics of efficiency and ecosystem services, it fails to account for the qualitative, affective, and relational dimensions of human–nature interactions.

Most critically, these technocratic solutions represent what I call "probable futures"—futures derived from mathematical models and statistical projections of the present. They are safe bets. They fit into existing economic spreadsheets. But because they do not challenge the underlying power dynamics, they often lead to "green gentrification" (Anguelovski et al., 2018). When green spaces are designed as amenities to increase property value rather than as essential commons, they displace vulnerable communities, effectively creating green enclaves for the wealthy while pushing the poor into gray, dense margins. A dense and green city achieved through technocratic means may be "probable" in our current economic model, but it is profoundly unjust.

3 The trap of imagination vs. the necessity of plausibility

It has become a truism in recent years to say that we, in late capitalism, lack the imagination to solve these crises. The aphorism "It is easier to imagine the end of the world than the end of capitalism," often attributed to Fredric Jameson or Mark Fisher, is frequently cited to diagnose our paralysis. But is this truly a failure of imagination? I argue it is not. Imagination is a cognitive capacity we all use constantly: when we interpret the feelings of others ("mind-reading"), when we daydream, or when we strategize (Gosetti-Ferencei, 2023; Matherne, 2024). To say we cannot imagine is to say we cannot think. We can easily imagine a city that is a lush, vertical forest where humans and animals cohabit. Artists do it every day.

The real deficit lies in plausibility and credibility. We lack the ability to generate proposals that are not just imaginative but socially and economically believable. Plausibility, derived from the Latin *plausibilis*, related to applause, suggests something that commands approval because it resonates with common sense. Our current "common sense," forged by decades of neoliberal urbanism, tells us that a truly dense, ecological city is "impossible" because it violates the laws of the market.

We are stuck navigating between two poles: the "probable future" (more of the same, with slightly better technology) and the "impossible future" (utopian visions we dismiss as fantasy). To build a dense and green city, we must inhabit the uncomfortable middle ground of the "plausible possible." This requires us to stretch our "credibility horizons." We must construct new imaginaries, socially accepted models of reality, that make the radical integration of nature and density feel not just desirable, but viable.

This is why the technocratic approach is so seductive; it requires no stretch of plausibility. It fits the model. To move beyond it, we need "epistemic pluralism," we need to validate other ways of knowing and being that make the "impossible" seem achievable.

4 Density and greening as ontopolitical practice

To transcend these limitations, we must approach urban re-naturing as an ontopolitical practice. Ontopolitics refers to the conflicts over "what implies what," or fundamentally, what constitutes reality (Blaser, 2013). An ontopolitical approach recognizes that the "city" is not a singular, fixed reality but a "pluriverse" (Escobar, 2018) composed of multiple, overlapping worlds (Descola, 2024).

In this view, density is not just a measure of people per square kilometer, but a measure of relational intensity. A dense city is a site of intense entanglement between humans, animals, plants, and microbes. Re-naturing, therefore, becomes a project of acknowledging and nurturing these entanglements. It is about creating a "credible future" where non-humans are citizens, not furniture.

Table 1 contrasts the prevailing technocratic approach (the "probable") with the proposed ontopolitical framework (the "plausible possible"), highlighting the shift required to genuinely integrate density and biodiversity.

The distinction between probable, plausible, and possible futures is not merely semantic. Each corresponds to a different mode of governance rationality. They expand what governing bodies consider credible without severing ties to operational reality. If we accept the ontopolitical premise, the governance of urban space must evolve. We need to move from managing "green infrastructure" to practicing "living governance". This concept draws on the work of multispecies urbanism (Wolch, 2002; Houston et al., 2018), suggesting that governance is not just a human affair but a negotiation with the more-than-human world.

Living governance implies a shift from construction to maintenance and care (Tronto, 1993). In a dense city, space is scarce. Large, pristine parks may not always be feasible. Instead, the focus shifts to the "interstices"—the cracks in the pavement, the balconies, the verges, and the shared courtyards. These are the sites of potential cohabitation. To make this vision *plausible*, we must stop dismissing "maintenance" as a lesser activity than "innovation." We are obsessed with the new, with the groundbreaking. Yet, a dense and green city is realized not through grand masterplans alone but through millions of micro-interactions of care. It is about the "potency" of the small scale—the

TABLE 1 Comparison between technocratic and ontopolitical approaches to urban greening, including transitional mechanisms.

Dimension	Technocratic approach (*statu quo*/the probable)	Ontopolitical approach (proposed/the plausible possible)	Transitional mechanisms within existing institutions
Ontological premise	Nature and city are distinct domains; nature is inserted into urban fabric.	City as multispecies assemblage; humans and non-humans co-constitute urban reality.	Introduce biodiversity-as-habitat criteria into existing green infrastructure (GI) frameworks; recognize ecological corridors in zoning maps.
Vision of nature	Nature as resource, infrastructure, ecosystem service, or amenity.	Nature as co-inhabitant, agent, and political presence; relational entity.	Expand environmental impact assessments (EIA) to include habitat continuity and species-specific design requirements.
Epistemology/ knowledge systems	Primacy of scientific-technical expertise; quantitative metrics dominate.	Epistemic pluralism: integration of technical, local, indigenous, experiential, and maintenance-based knowledges.	Institutionalize participatory design charrettes; formalize community stewardship input in statutory planning reviews.
Temporal orientation	Short-to-medium term project cycles; performance metrics tied to funding cycles.	Long-term relational continuity; intergenerational and ecological time horizons.	Require 20–30-year maintenance and stewardship plans attached to development approvals.
Governance model	Top-down management; siloed departments; command-and-control regulation.	Living governance: adaptive, distributed, participatory, care-centered.	Create cross-departmental biodiversity task forces; pilot neighborhood stewardship councils.
Primary goal	Efficiency, climate mitigation/adaptation, aesthetic improvement, economic value capture.	Multispecies flourishing, relational wellbeing, justice-centered cohabitation.	Integrate anti-displacement provisions into green redevelopment projects; attach social equity conditions to density bonuses.
Relationship to density	Green is added to density as compensation (green roofs, vertical forests).	Density redefined as ecological intensity and relational complexity; city as ecosystem.	Incentivize habitat-integrated façades, permeable surfaces, and soil restoration within density allowances.
Justice orientation	Distributional focus (who gets access to green space?); risk of green gentrification.	Procedural, recognitional, and interspecies justice; right to the city for humans and non-humans.	Embed anti-eviction covenants and community land trusts into green masterplans; require social impact assessment alongside environmental assessment.
Economic logic	Green space increases property value; market-aligned sustainability.	Commons-based stewardship; maintenance as public good; care economy orientation.	Reallocate municipal budgets from capital-intensive flagship parks to distributed maintenance funds; experiment with commons-based zoning overlays.
Scale of intervention	Flagship projects; iconic parks; master-planned eco-districts.	Distributed micro-ecologies; interstitial spaces; everyday maintenance practices.	Fund small-scale pilot projects; adopt tactical urbanism strategies tied to biodiversity outcomes.
Role of planner	Designer and regulator of space.	Facilitator of relationships; mediator of multispecies negotiation.	Introduce ecological literacy and care ethics training in planning departments.
Evaluation metrics	Carbon sequestration, heat reduction, cost–benefit ratios.	Relational indicators: habitat continuity, stewardship continuity, anti-displacement success, biodiversity resilience.	Expand performance dashboards to include social–ecological cohabitation metrics.

potential of a seed to become a tree, or a community group to steward a street corner.

This framework challenges the planner to become a facilitator of relationships rather than just a designer of spaces. It asks: How does this high-rise development facilitate bird migration? How does this density allowance respect the soil microbiome? And crucially, how do we ensure that the working-class residents who maintain these green spaces can afford to live there? Without addressing justice, our green futures remain implausible to most urban dwellers.

5 Conclusion: toward pluriversal urban futures

Can a city be dense and green? The answer is yes. But we will never reach that destination if we rely solely on the tools that built the gray city. We cannot "engineer" our way out of an ontological crisis.

The conflict between density and biodiversity is a product of our own limiting ontologies and our crisis of plausibility. We have allowed our sense of the possible to be colonized by what is merely probable. By adopting a perspective rooted in ontopolitical transformation, we can see density as an opportunity for intense, rich cohabitation—a "zoöpolis" where the rights of animals and plants to the city are recognized alongside our own (Wolch, 2002).

This requires a courageous departure from comfortable metrics. It demands that we embrace the messiness of biology and the complexity of social justice. We must dare to propose futures that today seem "unbearable" to the *statu quo*—futures where GDP is irrelevant, where weeds are citizens, and where care is the primary currency. A dense and green city is not a final static product to be achieved, but a continuous, negotiated process of learning to live together. It is a pluriverse where many worlds fit. Let us have the courage to make it plausible.

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References

Alves, F., and Vidal, D. G. (2024). Plural nature(s): an overview of their sociocultural construction. *Encyclopedia* 4, 1–12. doi: 10.3390/encyclopedia4010001

Anguelovski, I., Connolly, J. J. T., Masip, L., and Pearsall, H. (2018). Assessing green gentrification in historically disenfranchised neighborhoods: a longitudinal and spatial analysis of Barcelona. *Urban Geogr.* 39, 458–491. doi: 10.1080/02723638.2017.1349987

Blaser, M. (2010). *Storytelling Globalization from the Chaco and Beyond*. Durham: Duke University Press. doi: 10.2307/j.ctv11cw0jf

Blaser, M. (2013). Ontological conflicts and the stories of peoples in spite of Europe: toward a conversation on political ontology. *Curr. Anthropol.* 54, 547–568. doi: 10.1086/672270

Cadena, M. (2015). *Earth Beings. Ecologies of Practice across Andean Worlds*. Durham: Duke University Press.

Capek, S. M. (2010). Foregrounding nature: an invitation to think about shifting nature-city boundaries. *City Commun.* 9, 208–224. doi: 10.1111/j.1540-6040.2010.01327.x

Descola, P. (2024). *The Composition of Worlds*. Cambridge: Polity Press.

Escobar, A. (2018). *Designs for the Pluriverse*. Durham, NC: Duke University Press. doi: 10.1215/9780822371816

Gosetti-Ferencei, J. (2023). *Imagination: A Very Short Introduction*. Oxford: Oxford University Press. doi: 10.1093/actrade/9780198830023.001.0001

Heynen, N., Kaika, M., and Swyngedouw, E. (2006). *In the Nature of Cities—Urban Political Ecology and the Politics of Urban Metabolism*. London: Taylor and Francis. doi: 10.4324/9780203027523

Houston, D., Hillier, J., MacCallum, D., Steele, W., and Byrne, J. (2018). Make kin, not cities! Multispecies entanglements and 'becoming-world' in planning theory. *Plan. Theory* 17, 190–212. doi: 10.1177/1473095216688042

Kabisch, N., Frantzeskaki, N., Pauleit, S., Naumann, S., Davis, M., Artmann, M., et al. (2016). Nature-based solutions to climate change mitigation and adaptation in urban areas: perspectives on indicators, knowledge gaps, barriers, and opportunities for action. *Ecol. Soc.* 21:39. doi: 10.5751/ES-08373-210239

Matherne, S. (2024). "Imagination as a cognitive capacity," in *Seeing More: Kant's Theory of Imagination Get Access Arrow*, ed. S. Matherne (Oxford: Oxford University Press), 33–49. doi: 10.1093/9780191999291.003.0002

Rosa, H. (2021). *Resonance: A Sociology of Our Relationship to the World*. Cambridge: Polity Press.

Swyngedouw, E. (2004). *Social Power and the Urbanization of Water: Flows of Power Get Access Arrow*. Oxford: Oxford Academic. doi: 10.1093/oso/9780198233916.001.0001

Swyngedouw, E., and Heynen, N. C. (2003). Urban political ecology, justice and the politics of scale. *Antipode* 35, 898–918. doi: 10.1111/j.1467-8330.2003.00364.x

Tronto, J. (1993). *Moral Boundaries: A Political Argument for an Ethic of Care*. New York, NY: Routledge.

Wolch, J. (2002). Anima urbis. *Prog. Hum. Geogr.* 26, 721–742. doi: 10.1191/0309132502ph400oa