
Paving (through) Amazonia: neoliberal urbanism and the reperipheralization of Roraima

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Received 31 July 2012; in revised form 11 December 2012;

published online 29 October 2013

Abstract. This paper examines the neoliberal reshaping of infrastructure provision in Brazil's extreme north since the mid-1990s, when roadway investments resulted in unprecedented regional connectivity. The BR-174 upgrade, the era's most important project, marked a transition from resource-based developmentalism to free-market transnationalism. Primarily concerned with urban competitiveness, the federal government funded the trunk roadway's paving to facilitate manufacturing exports from Manaus. While an effort was made to minimize deforestation, planners sidelined development implications in adjacent Roraima. The state's urban system has thus experienced reperipheralization and intensified primacy. Market-led growth now compounds the inheritance of hierarchical centralism and ongoing governmental neglect. Our study shows a vast territory dependent on primate cities for basic goods and services. Travelling with Roraimans from bypassed towns, we detected long-distance passenger transportation and surface logistics with selective routes. Heterogeneous Roraiman (im)mobilities comprise middle-class tourism and heightened consumerism as well as informal mobility tactics and transnational circulations of precarious labor. The paper exhorts neoliberal urbanism research to look beyond both EuroAmerica's metropolises and their Global South counterparts. Urbanization dynamics in Brazil's extreme north demonstrate that market-disciplined investments to globalize cities produce far-reaching spatial effects. These are felt even by *functionally-articulated-yet-marginalized* peripheries in ostensibly remote locations.

Keywords: Brazilian Amazon, regional planning, neoliberal urbanism, planetary urbanization

Introduction

In the current era of planetary urbanization, material circuits originating in cities reach vast territories—revealing their spatial effects even in ostensibly remote locations. Extant studies of neoliberal urbanism show that, in the context of extensive urban relationality, imperatives of intermetropolitan and transnational competitiveness exert a hegemonic influence on territorially based policies—which fosters the widespread adoption of market-disciplined city-building technologies. Postcolonial critics point out that, despite their claims, these studies rarely venture beyond EuroAmerica's globalized metropolitan realms in their chronicles of world-conjuring projects. While sympathetic to the argument, we find the growing literature on postcolonial urbanism also partial to methodological metropolitanism.

Therefore, this paper presents a case study that speaks to the far-reaching implications of neoliberal urbanism from a Global South perspective. Our analysis engages the Brazilian Amazon, a territory undergoing thorough—albeit peculiarly sparse—urbanization. We focus on extensive urbanization processes occurring in the extreme north, particularly the

development corridor along the BR-174 roadway. This 974 km-long trunk road provides a surface link between Manaus, the region's overarching metropolitan center, and the border with Venezuela. BR-174 cuts across Roraima, constituting the state's main transportation corridor: it services the capital city of Boa Vista (BV) and towns that are much smaller in size but nevertheless of critical importance for local development. This study shows that the paving of BR-174 in the mid-1990s resulted in unprecedented connectivity and fostered new urbanization dynamics. Tracing a genealogical analysis, we first argue that this federally funded project was guided by distinctively neoliberal logics, which departed from the resource-based developmentalism of previous decades. Thus, the investment aimed to promote industrial exports from Manaus by strengthening the city's surface connectivity at the supranational scale. Moreover, the plan lacked ancillary programs to spearhead development along BR-174's area of influence. A decade later, reperipheralization characterizes urbanization dynamics in Roraima and monocentrism has deepened. Tracing heterogeneous Roraiman (im)mobilities, we present fieldwork evidence of selective circulations that bypass places and marginalize populations.

The paper proceeds in four sections and a conclusion. The first section discusses the relevance of neoliberal urbanism debates for new urbanization dynamics in Amazonia, particularly the extreme north region. The second section sketches a historically embedded policy analysis exposing how notions of nodal city connectivity and transnational competitiveness shaped the BR-174 project, an initiative that emerged amid the tidal wave of neoliberal reforms sweeping Brazil in the 1990s. The third section examines the reperipheralization process unfolding over the ensuing decade. Relying on secondary studies and governmental statistics, we show that the BR-174 urbanization corridor is characterized by resurfacing monocentrism; inequalities between places deepen as market-led growth compounds the problematic inheritance of hierarchical centralism. The final section discusses our fieldwork along BR-174, which focused on its heterogeneous (im)mobilities. We show that logistics and transportation systems exhibit primate-city biases reminiscent of the river-based urban network of yesteryear. Bypassed Roraimans rely on creative, often informal, mobility tactics in the face of policy neglect and market exclusion. The conclusion discusses how Amazonian urbanization may inform cosmopolitan urban studies, contributing towards a neoliberal urbanism research more attuned to the far-reaching implications of market-centric city-making—particularly the social production of *functionally-articulated-yet-marginalized* urban peripheries in ostensibly remote locations.

Looking at Roraima's urbanization through the prism of neoliberal urbanism

The urbanization of the world cannot be reduced to a demographic transition. Much attention has been paid to the worldwide emergence of massive agglomerations with unprecedented extents. Yet, planetary urbanization also means that cities are central to the articulation of material networks and circuits that reach virtually every place on Earth (Soja and Kanai, 2008). For Brenner and Schmid (2011), under this form of generalized urbanization: (a) 'city-like' built environments now extend well beyond the boundaries of easily recognizable metropolitan settings; and (b) sociopolitical regulations created for city-centric global economies increasingly govern the life of seemingly remote populations. Within this context of extensive urban relationality and intermetropolitan competition, several critical geographers have argued convincingly that neoliberal urbanism has become a hegemonic mode of urban management (Brenner and Theodore, 2002; Brenner et al, 2010; Peck and Tickell, 2002). These authors show how various governing regimes apply free-market technologies to secure the global competitiveness of select cities (and city quarters)—for example, by relying on fiscal exemption schemes and lax regulatory oversight but also building infrastructure networks that privilege translocal connectivity over territorial integration. This research constitutes a

critical turn in the ‘global cities’ literature aiming to link shifts in cities to broader societal transformations. [See Brenner and Keil (2006) for a compendium.] Furthermore, neoliberal urbanism explicitly highlights how the production of urban space is centrally constitutive of neoliberalization: that is, the transnational articulation of market-centric social orders.

In recent years a postcolonial critique has invited researchers of neoliberal urbanism to examine the empirical and theoretical limitations to the discourse. This broad, interdisciplinary critique can be summed up in the argument that neoliberal urbanism and its political economy framework are predicated on a rigid form of class analysis, which is applicable mainly to the limited geographical realm of the North Atlantic Basin. Therefore, the neoliberal hypothesis falls short in explaining the emergence of variegated landscapes of world-conjuring urbanisms across North–South divides (Parnell and Robinson, 2012; Roy, 2009; Roy and Ong, 2011). In our view, this is an important step to broaden the explanatory realm of neoliberal urbanism. Yet, postcolonial authors often share the city-centric bias in the literature they critique as they also fall into what Bunnell and Maringati (2010) call methodological metropolitanism: that is, the privileging of clearly identifiable metropolitan cores for intensive fieldwork. Geographically constrained empirical investigation leads to theoretical limitations as urban theory-building is restricted to a few, selective (often repetitive) sites without venturing to trace the distantiated effects that the market-centric management of cities may be causing in much broader urbanization realms.

Robinson’s (2011) writings on travelling policies (market-oriented and otherwise) provide a productive starting point to begin the critical reconstruction of a global research agenda on neoliberal urbanism. Robinson believes that studies focusing on the widespread adoption of neoliberal city-building technologies are indeed compatible with the postcolonial call to theorize from a broad realm of geographical locations. In fact, she argues that the profuse circulation of neoliberal urbanism to both the world’s poorest and wealthiest cities opens up insightful opportunities for relational and comparative research on governmental restructuring and urban transformation (page 1087).

Robinson forewarns against the imposition of normative values based on the geohistorically specific experiences with neoliberalization that EuroAmerica has undergone since the 1970s. Empirically grounded analyses should be attuned to why, how, and to what effects regimes of urban governance adopt market-centric policies and rationalities, often in contingent assemblage with developmentalist, traditional/authoritarian, or even progressively reformist policy making (page 1099). This analytic maneuver allows us to engage neoliberal urbanism from multiple entry points. Thus Robinson’s work deparochializes neoliberal urbanism by broadening its explanatory realm—particularly the theorizing of how the impetus towards market discipline acquires territorial embeddedness and may be contested and reshaped in locales with distinctive historical trajectories and geographical specificities.

In this paper we contend that it is time for a second phase in the postcolonial critique of neoliberal urbanism. Contributions should move beyond the theoretical justification of the perspective’s relevance and urgency. We need a broad range of in-depth case studies that can dialogue with extant research, thereby probing its potentials and limits (such as, for example, its methodological metropolitanism). With that aim, we offer a case of urbanization in the Brazilian Amazon to stimulate further discussion on how the tenets of neoliberal urbanism may be probed from locations where the discourse has less-apparent applicability. Our particular goal is to elicit a debate on how market-centric exclusions may affect ostensibly remote urban peripheries.

The study has its own intrinsic empirical interest: the English-language literature on Roraiman urbanization is scanty—a few scattered studies chronicle only up to the ‘gold rush’ of the 1980s and early 1990s [Abers and Lourenço (1993)—more recent studies in Portuguese include Kanai et al (2012), Oliveira (2011) and Silva and Silva (2004)]. Yet we aim further:

our intention is to discuss Amazonian urbanization from a global perspective that can pinpoint the increasing role of neoliberal urbanism in contemporary dynamics. Thereby, we heed Moreira's (2010, pages 9–10) call to move beyond the state-centric bias conflating Brazilian geographical thought with the territorially circumspect empirical study of the country's geography.

To be clear, extant literature on Amazonian urbanization is rich and insightful in its discussions of how growth patterns can no longer be attributed solely to resource-frontier development: an extensive urban network now articulates the region and provides multiple extraterritorial linkages (Becker, 2005; Becker and Stenner, 2008; Théry, 2005). Correa's (1987) seminal contribution demonstrates how value chains have historically linked Amazonian cities and towns to national and world centers of geopolitical power and capital accumulation. Browder and Godfrey's (1997) book-length study discusses the uneven and highly mediated influence of globalization in the development of variegated (and contested) urban systems across the Brazilian Amazon—particularly in the populist urban expansion front of Rondônia and the corporatist cities of southern Pará.

Yet, shifts in Amazonian urbanization need to be problematized further. Market-disciplined and transnationally oriented city-building technologies now exert a conspicuous influence on spatial planning for the region, particularly in the extreme north area comprised of Roraima and northern Amazonas. Several contextual factors obscure the significance that neoliberal urbanism has had there and throughout Brazil (Caldeira and Holston, 2005). These include the following: (a) a pervasive developmentalist discourse of national progress and emergence of neopopulist approaches to the governing of social reproduction (Druck and Filgueiras, 2007); (b) the Brazilian nation-state's quest to lead processes of regional integration according to its interests, and to acquire recognition as an environmental champion as part of its global geopolitical influence (Castro, 2012; Mello and Théry, 2003). Yet, with this study we respond to Santos's (2009, page 139) call to continue examining the implications and complex conjunctures of neoliberalization for the social production of urban space.

Alongside our main focus on the imbrications between neoliberal urbanism in Brazil's extreme north, this study is also informed by (and seeks to dialogue with) other notions from global urban studies in no lesser need of postcolonial revision. These include what Soja (2011) calls multiscalar processes of regional urbanization. The increased interdependencies between cities and towns along the upgraded BR-174 roadway show that it is not only in the massively developed city-regions of EuroAmerica that transformative spatial effects transmit translocally. Functional articulation has led to deepening social–spatial inequalities for Roraima, producing a process of reperipheralization that calls for a broadened notion of urban peripheries. The concept needs to be defined not solely as the disadvantaged neighborhoods that networked infrastructures bypass in their privileging of nodal city centers (Graham and Marvin, 2001, pages 13–16). This paper shows that the unevenly (dis)connected geographies of neoliberal urbanism extend much farther in contexts of regional urbanization.

Finally, we draw from the mobilities turn for this paper's conceptualization and part of its research methodology. This calls for less sedentary and territorial approaches to fieldwork that may capture the extended relationality of city spaces (McCann and Ward, 2011). This research in/of movement was useful to trace (travel with) the mobilities emerging along BR-174 and to problematize the roadway itself. Hannam et al (2006) detonated the notion that transport systems are engineering platforms to be assessed solely on the basis of aggregate flows. Instead, roadways constitute sociomaterial assemblages alternatively enabling/disabling or forcing differentiated types of mobilities. The fixity (immobility) of material infrastructures and labors necessarily moors the overall functioning and stability of circuits (see also Urry, 2007).

A surgical cut through the rainforest: the genesis of a neoliberal rationale

BR-174 extends between Manaus and the Venezuelan border, where it connects with Troncal 10 and then with roadways leading to Caribbean Rim ports. Methodologically borrowing from Peck (2010), this section relies on genealogical policy analysis (based on secondary literature) and governmental discourse analysis (based on reports and official communications). We show that the federal investment on roadway upgrades in the mid-1990s aimed to promote manufacturing exports from Manaus. The metropolis was provided with enhanced surface connectivity at the supranational scale. This was hence a formative moment for neoliberal imperatives to begin playing more conspicuous roles in the shaping of Amazonian spatial planning—albeit in a complex entanglement with ongoing developmentalism and a more assertive environmental critique. The federal project brought about unprecedented connectivity for the entire region—over 700 km of dirt roads were paved; bridges built; and electric transmission lines tended. Doubtless, the consolidated corridor realized longstanding ambitions in Roraima to improve the state's tortuous river-based transport system (Guerra, 1957; Oliveira, 2007; Souza, 1977). Motor vehicles can now cross the state yearlong. Power supply is stable. Diminished seasonality translates into a lower cost of living: reliable supply chains evince less frequent price spikes. Yet, for the project planners, Roraima's growth was secondary to the goal of transnationalizing Manaus. Rather than ancillary programs leveraging infrastructure investments for local development, the paving came with the promise of strict conservation measures that would minimize the threat of deforestation.

In the early 1990s Brazil implemented thorough market-oriented reforms in accordance with the neoliberal mandate to dismantle governmental frameworks and open up domestic markets that swept through Latin America (Wolford, 2005, page 246). During his two-term presidency (1995–2002), Fernando Henrique Cardoso (FHC) was able to advance the policy agenda from this initial state 'roll-back' into what Peck and Tickell (2002) call a 'roll-out' of proactive neoliberalization. A constitutive aspect of this second moment is the building of territorial configurations (including transnationalized spaces) that support/reinforce a market-disciplined social order. A preeminent Brazilian example of this production of neoliberal geographies can be found in FHC's multiyear federal investment plans—the *Brasil em Ação* (Brazil in Action or BEA) program (1996–99) and subsequent *Avança Brasil* (Brazil Forward or AB) program (2000–03). While inheriting their format from the era of federal dirigisme, these plans were carried out in partnership with state and local governments and, in the AB case, relied explicitly on foreign capital as the federal government was no longer positioned as the main driver of economic growth in a protected national economy (Fearnside, 2002, page 735; Sallum, 2000).

BR-174 was one of the most prominent Amazonian projects included in the BEA package. It is also indicative of the increasing influence of neoliberal rationalities on the region's spatial planning. During the developmentalist decades of the mid-20th century, Amazonia represented a resource-exploitation frontier in need of further integration with the southeastern core of Brazil's space economy. Yet, as the century drew to a close, more attention was paid to (a) the potential value of biodiversity and standing rainforests (eg, as generators of carbon-credit revenues); and (b) Amazonia's centrality at the continental and hemispheric scales—of strategic importance to articulate transnational infrastructure networks (Becker, 1999; Théry, 2005).

But we characterize the BR-174 roadway upgrade as an exemplar of neoliberal urbanism not simply because of its inclusion in the entrepreneurial BEA package. The initiative exhibited an explicit city-centric bias worthy of discussion. In the project's official description the FHC administration bought into a form of spatial trickle-down. It asserted that "international economic integration" would strengthen Manaus's position as an urban

center at the continental and hemispheric scales, thereby realizing region-wide benefits (Brasil, 1998). Gains would particularly accrue to the city's extensive manufacturing base: lowered transportation costs would provide a competitive edge in foreign markets (Fearnside and Graça, 2006, page 712). Furthermore, the policy discourse pandered to the interests of a growing urban middle class by promising Manauarans easier car access to nearby tourist attractions—for example, the Presidente Figueiredo waterfalls (Brasil, 1998). The paving would also translate into cheaper long-distance bus fares to BV, facilitating exchanges between Amazonas and Roraima (Brasil, 1998).

As continues to be the case with roadway projects, representatives from the two states lent their enthusiastic support to the BR-174 upgrade (Gonçalves, 1998). Besides well-received federal funds on both sides, BR-174 acquired a particular relevance for Amazonas. Manaus, the state's capital and primate city, was in the midst of crisis-generated urban restructuring (Soja, 2001). Created in the mid-1960s, the *Zona Franca de Manaus* (ZFM or Manaus Tax-Free Zone) scheme supported fast-paced industrial expansion. Federally granted fiscal benefits attracted domestic and international investments in lightweight manufacturing: for example, assembly lines for scooters, computer and television screens, and watches. Yet ZFM lost its competitive edge when President Fernando Collor de Mello (1990–92) liberalized the Brazilian economy. With lower tariffs across the board, firms sought to reduce transport costs by moving to locations closer to Brazil's main consumer markets. Industrial revenues fell from US \$8.3 billion in 1990 to US \$4.5 billion in 1992. Employment was almost halved from 76 000 to 40 000 jobs (Pereira, 2005, page 20).

Hence, through transnational connectivity, the roadway was expected to be part of a new growth model replacing the domestically oriented industrialization approach which was coming to a halt. BR-174 could facilitate overseas market development and boost exports by linking Manaus to the Venezuelan ports of Puerto La Cruz and Puerto Ordaz (Ciudad Guayana). The search for competitiveness also led to industrial reconversion, new investments in urban infrastructure (ports, airport, R&D facilities) and increased state and municipal subsidies supplementing ongoing federal fiscal benefits. Restructuring eventually paid off. By the mid-2000s, municipal gross domestic product was one of the largest in Brazil—only significantly behind São Paulo, Brasília, and Rio de Janeiro. Manaus constitutes a peculiar urban enclave amid the Amazon Rainforest, albeit with an economic size comparable with that of Curitiba and Belo Horizonte—cities surrounded by much larger metropolitan areas and developed regions.

Paradoxically, exports still represent a small fraction of industrial output. Nevertheless, Becker and Stenner (2008, pages 103–118) argue that Manaus has the capacity to develop global city functions: beyond its manufacturing strengths, Manaus could leverage its strategic location in the Amazon Rainforest. Oliveira and Schor (2009) point out that urban restructuring has led to deeper sociospatial inequalities; and industrial reconversion led to environmental degradation (Pereira, 2005). Yet, the city's economic development policies maintain an agenda of neoliberal urbanism that includes the expansion of tax-exempted manufacturing, ecological entrepreneurialism, and the redevelopment and upgrade of select city quarters with high real-estate values (Kanai, forthcoming). At the regional and continental scales, Brazil-led multilateral investment programs such as the Initiative for the Integration of Regional Infrastructure in South America continue to develop infrastructure networks that place Manaus at the center of an extensive system of transnational circulations (Castro, 2012).

In closing this section, it is necessary to remark that the BR-174 project was not exempt from controversy, resistance coming particularly from environmental and indigenous activists. The neoliberal urbanism agenda was forced to negotiate with an empowered environmental

rationality contesting the problematic inheritance of authoritarian developmentalism (Goodland, 1980). Thus governmental actors promised that the paving would not result in widespread deforestation through the proliferation of lateral roads and expansion of tropical land-colonization schemes. The Amazonas–Roraima interstate border was a particularly sensitive area where the Balbina hydroelectric plant had caused environmental degradation and population displacements (Fearnside, 1989; 1990). Moreover, in the 1970s the BR-174’s original tracing as a dirt road was tainted with a bloody episode of state-sponsored violence that drove the Waimiri-Atroari people to near extinction (Escobar, 1998; Mourão, 2003). Thus, the project adopted a discourse of minimized environmental impacts, pledging a “surgical cut through the forest”. The paving was to be followed with proactive conservation, meticulous land-use planning, and strict enforcement of regulations to prevent deforestation (Laurance, 1998, page 412).

Current conditions along BR-174 depart noticeably from the initial promise. Indeed, deforestation has occurred, particularly in southern Roraima and periurban areas north of Manaus (Fearnside and Graça, 2006, page 712; Laurance, 2000, page 116). Yet, throughout most of Roraima growth remains concentrated within a narrow corridor along the roadway. In fact, public expenditures have been dedicated largely to subsequent upgrades and maintenance of BR-174—the latest project was completed in 2006 and a new upgrade and lane widening was approved in 2010 (*Folha de Boa Vista* 2010). Therefore, the roadway network has not expanded much further across the state: in 2008 BR-174’s share climbed to 36% of all roads and an astounding 66% of paved federal roads (own calculations based on SEPLAN, 2009, page 62).

Pervasive peripherality: inherited centralism and the impacts of market-led connectivity

The roadway’s paving brought about transformative effects in Roraima. Such impacts need to be assessed against preexisting conditions. Relying on historical sources and secondary data, this section shows that Roraima’s inherited peripherality could not be subsumed in geographical remoteness. It resulted rather from a subordinated form of territorial incorporation: hierarchical centralism denied local opportunities and political autonomy. Therefore, new forms of market-led functional articulation along BR-174 are now overlaid on an inherited landscape of uneven development, which results in a condition of re-peripheralization and territorial exclusion.

Roraima is Brazil’s least populated state—412 783 estimated residents in 2008 at an average density of less than 2 inhabitants per square kilometer (SEPLAN, 2009, page 12). It is also one of the most recently created units in the federation. In 1943 President Getúlio Vargas created the territory of Rio Branco (later renamed Roraima) by partitioning off the northernmost portion of Amazonas. Suspicious of foreign territorial threats, the Vargas administration sought to consolidate the presence of the Brazilian state in this and other borderlands (Porto, 2002). Such concerns with national security were part of *Estado Novo* (New State) politics. Vargas sought to build a national economy and construct a national polity by securing and sealing off a national territory. Therefore, the role of spatial planning then was to foster domestic territorial integration. It followed principles of internal order and cohesion under centralized governmental controls (Freitas, 1997, page 26).

Political autonomy came only in the late 1980s, when Roraima gained federal state status according to Brazil’s democratically reformed constitution (Tomio, 2002). Yet, the centralist inheritance looms large. Over the past three decades, several states in Amazonia have undergone territorial reconfigurations, partitions, and institutional decentralization. Roraima, however, maintains its original 1943 boundaries and has experienced little decentralization (Barbosa, 1999; Martins, 2001). With only fifteen *municípios* (with areas and functions comparable with those of counties rather than municipalities), the state has

the lowest number of second-order subdivisions in all of Brazil. Moreover, municípios have scarce resources with which to service their populations and depend on federal transfers to meet fiscal obligations. Further decentralization is a recurrent claim from local political elites despite federal denials—the counterargument being that, due to low population densities and dispersed settlements, Roraima cannot sustain a larger bureaucratic infrastructure without additional subsidies (Oliveira, 2003; Rodrigues, 1996).

Figure 1 shows two factors limiting local autonomy further. Firstly, Roraima has the largest overlap between federally administered territories and local jurisdictions. Indigenous reservations occupy 46% of the land area—indigenous people accounting for 10% of Roraima's population (SEPLAN, 2009, page 21). Coordination with tribes falls under the remit of a federal agency (FUNAI), also in charge of developing territorial plans and policies. State and local government participation in this process is tenuous and contested. Federal agencies also manage environmental protection zones and military bases—which occupy extensive areas.

Secondly, Roraima's municípios constitute vast and unevenly settled jurisdictions. Their administrative structures are highly centralized in municipal capitals (*idades*) from which most governmental services are provided—restricting access for those in remote locations. Aggravating the problem, the map shows that, instead of a central place in their município, several *idades* are located along the state's scarce roadway system—mostly within a 100 km radius of BV. Moreover, unlike all other Brazilian states, Roraima does not have officially recognized *vilas* (towns). In the past decade several settlements have surpassed the demographic size of smaller *idades* even though they have not been granted urban recognition and lack infrastructure (Silva and Silva, 2004, page 41). Of particular interest are the towns in the southern part of the state, particularly in the município of Rorainópolis, which have grown along BR-174. These towns service roadway traffic (eg, with roadside stands, shops, and small motels) but are still treated as 'rural' places for resource-allocation purposes.

In terms of uneven development patterns, new urbanization dynamics have reinforced rather than diminished the historical primacy of BV, Roraima's macrocephalous capital—even if the city's dependency on federal funds has not decreased. Before 1943 BV functioned as a miniscule cattle-ranching outpost servicing Manaus (Silva, 2007). Federalization transformed the settlement: a military base and bureaucratic-administrative center were built (page 142). Imposing buildings and grand squares were clustered in the city center, from which broad radial roads beamed outwards—the layout emulated Belo Horizonte, Minas Gerais's dynamic capital and itself a replica of Hausmannian Paris (Freitas, 1993). However, federal investments did not produce a resilient urban economy spearheading regional development across Roraima. On the contrary, BV remains a governmental enclave of primarily geopolitical importance within a state with a largely extractive and agroindustrial economic profile. Moreover, the city still depends on federal funds to sustain its public sector, which accounts for the largest share of local product (Silva and Silva, 2004, page 45). The clustering of public (civilian and military) employees created a relatively stable and reliable consumer market that stimulated commerce (Santos, 2004, pages 177–178). Yet, the sector's reliance on salaried workers resulted in highly fluctuating effective demand. Payday bouts of activity still occur; activity contracts significantly the rest of the month.

Yet, almost two thirds of Roraimans congregate in BV, the city's share of gross state product reaching over 75% in the mid-2000s [own calculations based on IBGE (2006)]. Primacy is also evident in the distribution of infrastructure, provision of public services, and access to communications and transport. Most strikingly, BV has four times as many shops and commercial facilities (4047) as all the other municípios (978) combined (IBGE, 2003). The ratio for banks and financial institutions is similar. While BV monopolizes almost

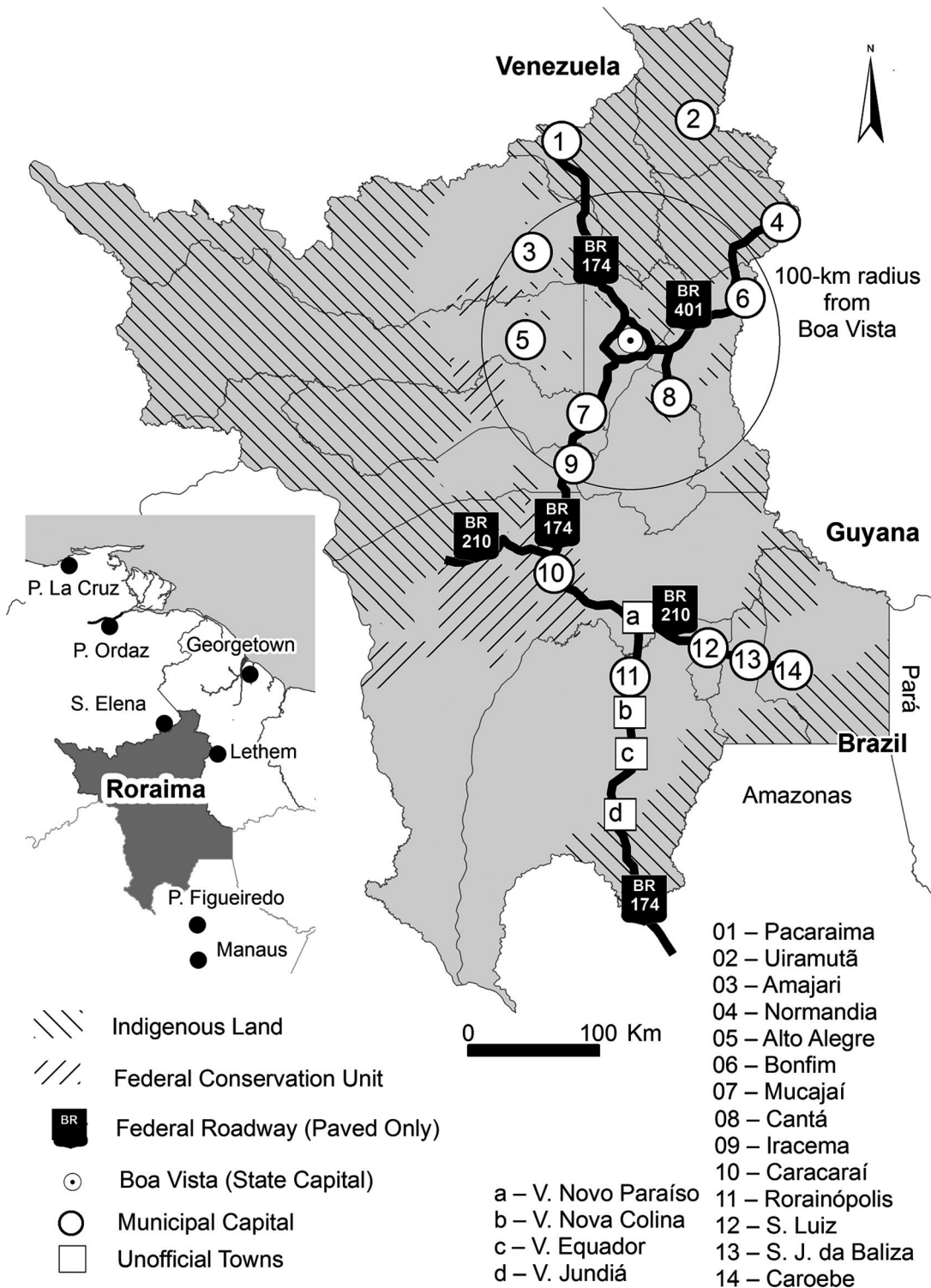


Figure 1. Map of Roraima's administrative divisions and main roads (source: author's own map on data from Instituto Brasileiro de Geografia e Estatística. Created on ArcGIS 10 July 2012)..

three quarters of Roraima's twenty-one agencies, there are nine municípios devoid of banks (SEPLAN, 2009, page 81). Similar concentrations occur even in sectors with high public sector participation (eg, healthcare), which could have been arranged in a less uneven geographical distribution. Yet, the political will to distribute access through policy design

and spatial planning was lacking: 76% of hospital beds, 89% of employed doctors, 81% of nursing personnel, and 81% of X-ray machines concentrate in BV (Silva and Coelho, 2006, page 32).

Diniz (2008) points out that the past decade has witnessed the reversal of previous dispersal trends—then caused by the development of natural resource frontiers in the 1980s and early 1990s. BV is once again growing faster than Roraima as a whole. In fact, BV alone accounted for two thirds of nominal growth in gross state product during the early 2000s [own calculations based on data from IBGE (2006)]. It is noteworthy that in 2008 the federal government created a free-trade zone in BV so that the city would not fall further behind Manaus. Yet this fiscal package of tax exemptions and benefits is likely to exacerbate disparities between the macrocephalous capital and the rest of Roraima.

The significance of Roraima's urbanization is modest at the regional scale. In demographic terms, BV is the smallest Amazonian capital and even trails behind secondary cities such as Santarém (Pará). Therefore, Roraima's entire urban system falls within the regional influence of Manaus in neighboring Amazonas state. A national study of intercity flows (*Regiões de Influência das Cidades*) shows that Roraimans depend on Manaus to access specialized goods and services as well as extraregional transport connectivity. In fact, southern Roraima residents travel the longest distances for shopping purposes in all of Brazil—270 km on average as many need to journey to Manaus in order to purchase apparel, furniture, and electric appliances (Fenley et al, 2007; IBGE, 2008, page 163). Such a dependency is also evident in interstate trade imbalances, with Roraima bearing a deficit equivalent to 5.9% of its gross domestic product [own calculations based on RedeSist (no date, page 16)]. Markets in BV are awash with staple fruits, vegetables, and even regional foodstuffs such as manioc shipped in from Amazonas as well as states from the agriculturally rich Brazilian south (Vieira, 2010).

It is noteworthy that Manaus's area of influence and primacy extends over a vast territory equivalent to 19% of Brazil's land mass, but with less than 2% of population share and an even more modest contribution to GDP (IBGE, 2008, page 14). Metropolitan nodality translates in a local product per capita (16 500 Brazilian Reais) much higher than the regional average (10 400 BR). Roraima trails behind (9075 BR). But disparities have also deepened within the state, particularly between a rapidly expanding BV and resource-rich areas on the one hand, and interstitial rural lands on the other. Thus it is evident that Roraima's urban network has been engulfed by the diffuse yet increasingly articulated city-regional system centered on Manaus—a peculiarly dispersed case of extensive urbanization overlaid on a landscape of rainforests and savannas.

On the road(side): market-led circulations, territorial exclusions, and mobility tactics

Enhanced roadway connectivity and territorial reperiheralization brought about important consequences for the everyday lives of Roraimans. Borrowing from mobilities research, we focused our field research on socially differentiated forms of movement and the infrastructures that enable them (Hannam et al, 2006). We travelled BR-174 multiple times in a two-year period (2008–10), using various forms of public transportation as well as private vehicles. In addition to our own experiences with length and ease/difficulty of travel and site observations at points of departure/arrival, we conducted semistructured interviews with (both formal and informal) transport service providers and passengers. We also interviewed local authorities and surveyed consumer prices and availability of retail goods along the roadway.

Our field research indicated that the market-led logistics and passenger transport systems that emerged along the upgraded BR-174 exhibit a bias for Manaus and BV while marginalizing vast areas in the rest of Roraima. Smaller settlements and even secondary cities were relegated to lesser order distributional loops if not altogether bypassed. In fact, even within the BR-174

linear system relegated towns were forced to rely on mobility arrangements rather evocative of the traditional river-based transportation system and its dendritic patterns (Sheppard et al, 2009, page 478). These sites did not access the main circuit directly, needing instead to first reach the closest connecting node within a hierarchically arranged semilattice structure. In the face of such exclusions, disadvantaged populations relied on multiple mobility tactics.

Located half-way between Manaus (360 km) and BV (300 km), Rorainópolis is a fast-growing town that occupies a pivotal position on the BR-174 corridor and hence affords us an insightful vantage point to observe the roadway's (im)mobilities. An incipient hospitality infrastructure has developed to accommodate travelers. In the town center half a dozen hotels offer air-conditioned rooms and private parking. Owners reported that their clientele was composed largely of families returning from Caribbean vacations on Margarita Island, Venezuela—one of the favorite car trips of middle-class Manauarans. Traffic from BV increases before local and state elections: politicians come down from the capital with electoral promises. We also found accommodation catering to those with smaller budgets, such as residents from other parts of southern Roraima coming to Rorainópolis for its services—eg, automated bank machines to cash federal income benefits. Some of these travelers carry their own *redes* (hammocks) for the eventuality of an overnight delay. Makeshift boarding houses offer them modest spaces and hooks to spend the night for a much lower price than formal hotels.

Long-distance coaches provide transportation along BR-174. Nighttime service between BV and Manaus is available as several companies were able to negotiate leave of passage with the Waimiri-Atroari Indigenous Land—the reservation closes its gates to all other vehicles in order to prevent accidents and protect wildlife within the territory. Coaches, however, make only a few designated stops in select cidades. Those in bypassed towns rely on *moto-táxi* services providing bike rides to the nearest coach stop. This activity, organized into small local cooperatives, emerged as a response to the lack of other forms of transportation. Passengers may also lower their costs by sharing a long-distance cab known as *lotação*. This modality is particularly popular to travel to and from BV. Trips, however, begin only when the driver decides that enough passengers going to the same location have gathered in order to make it worth their while. Fares to main locations are congruent with travelled distances, but rates increase exponentially when the destination cannot be reached by BR-174 or the few other paved roadways—drivers also have the discretion to refuse service to locations on marginal roads depending on local conditions (eg, a flooded dirt road).

Price hikes also occur in the distribution of basic goods. Focusing on foodstuff logistics, we surveyed retail outlets in settlements of different sizes along BR-174. Goods shipped from Manaus are first sent to BV. They are then redistributed to smaller towns, even those located between the two cities. Smaller towns are also of less interest to larger franchises, which are directly linked to nationwide supply chains. Therefore, the shops in these towns offer a narrower selection of goods and are forced to pay higher price mark-ups—again paralleling conditions in peripheral riverine settlements (Moraes and Schor, 2010).

Yet, those who spoke to us felt largely positive about the abundance of materials flows that came after the roadway upgrade. Even smaller towns with a few thousand residents now have shops selling mopeds assembled at the ZFM. Yet, consumer affluence is nowhere more conspicuous than in thriving BV. Benefiting from incentives from the recently created free-trade zone, big national retailers have opened local branches—for example, adding 24-hour megapharmacies to the retail landscape. As of late 2012 two large-scale shopping malls (ubiquitous throughout urban Brazil) were being built in the city. Luxury condominium towers also fuel aspirations to metropolitan glamour. Developers from Manaus have built several of these in the wealthy east section along the Branco River. Moreover, a national hotel

chain has hedged its bets on BV's appeal as an exotic destination for ecotourism and built a complex in the city center. Meanwhile, more modest areas in the west side have witnessed the proliferation of knock-off shops, which provide local residents in lower income brackets with a sense of material progress.

The territorial selectivity of new growth dynamics has translated into uneven employment generation. The town of Caracarái provides particularly significant evidence on the matter as it has shrunk despite its adjacency to BR-174. For numerous decades Caracarái constituted Roraima's second largest urban settlement, functioning as a transfer point for river-based traffic from Manaus to shift to surface roads towards BV. With the roadway's paving these activities were abandoned and Caracarái suffered from economic hollowing out—for example, telephone line connections were more than halved between 2001 and 2006 (SEBRAE, 2006, page 20). Compounding the problem are the town's stagnant population size, pervasive underemployment and welfare dependency, and decayed built environment. Yet Caracarái retains certain nodal functions. The Petrobras energy company sited gas transfer and storage facilities in the town, rendering payments to the local government that are used to fund a minimum level of urban services.

More problematically, in the context of increased roadway traffic, the sex industry is growing in Caracarái. Seedy establishments are conspicuously located at the town's entrance, offering their services to BR-174 motorists and travelers. Whereas sex work is legal in Brazil, interviewed town residents suspected the exploitation of minors. Furthermore, previous studies show that the decaying town has become a recruitment site for sex workers taken to small-scale (often illegal) mines that Brazilians run in Venezuela and the Guianas. Thus, Caracarái constitutes a linked node within complex transnational networks of human trafficking and precarious circulations of sex workers (Oliveira, 2012; Pimentel and Oliveira, 2007).

In closing this section it must be stated that the market-led (im)mobilities that we observed were accompanied by generalized state neglect. Strict federal norms were imposed from afar and local governments suffered from high levels of absenteeism. Moreover, we found neglectful planning alongside the paved roadway. This included a 'ghost' industrial district zoned and demarcated but never built in Caracarái; dense residential neighborhoods in Rorainópolis virtually without any municipal sewer treatment; easily floodable streets in BV; and the already-mentioned issue of fast-growing settlements without official urban status.

Land demarcation was particularly problematic in the border town of Pacaraima overlaid on the São Marcos indigenous reservation. The town has a commercial, transportation, and administrative center that is crammed against the border crossing while residential areas are scattered over fractured hillsides. People from BV own some of the larger houses and come at weekends to enjoy the scenic *serra* landscape or make a stop on their way to Santa Elena de Uairén in Venezuela—where goods and gas can be purchased much more cheaply than in Brazil. Local officials claimed that they were largely unable to regulate growth, engage in infrastructure provision, or promote local economic development (eg, leveraging the area's touristic appeal). They lacked jurisdiction and found difficulty in coordinating actions with local indigenous tribes and the federal agencies administering their territories. Yet, even in towns unaffected by such complex territorial conjunctures, we encountered similar frustrations with local development capacities.

Concerned citizens' groups decried major delays in governmental actions and accused absentee local officials who, residing in BV, commuted to their offices only occasionally.

Concluding remarks and further research

This paper showed that new urbanization processes occurring in Brazil's extreme north evince significant consequences for historically peripheralized Roraima. New surface transport connectivity, especially the upgraded BR-174 trunk roadway, has spearheaded economic

growth, albeit in geographically uneven conditions led by market forces. Therefore, we concluded that the urban system has undergone a process of re-peripheralization in the wake of neoliberal approaches to infrastructure provision—these have been biased to strengthen city cores in the context of heightened intermetropolitan and transnational competition. Whereas Manaus (and to a lesser extent BV) experiences the advantages of a transnationalized roadway network, smaller cities and towns are largely bypassed by market-led circulations. Governmental neglect and the dearth of development alternatives compound such conditions.

We are aware that much has changed in Brazilian national politics since the FHC years of overt neoliberalism when BR-174 was paved. Regional planning for Amazonia has also reversed to developmentalism—for example, with the reinvention of institutions such as SUDAM (Superintendency of Development for the Amazon) under President Lula da Silva (LdS)—albeit now in conflict with an empowered conservationist movement and with strategic adoptions of market-centric technologies (Fatheuer, 2012, pages 86–99).

Yet this study showed that, in the extreme north, a distinctive neoliberal approach (based on transnationally oriented infrastructure and free-trade zone fiscal benefits and exceptions) remains influential in the configuration of urbanization dynamics. Therefore, the region is not only differentiated from other parts of Amazonia—for example, the corporatist cities of southern Pará and populist urbanization corridor of Rondônia (Browder and Godfrey, 1997), it is also increasingly integrated into a transnationally networked space in the northeast of South America and the Caribbean Rim. In fact, besides ongoing BR-174 upgrades, the paving of BR-401 was the only other major federal roadway project undertaken in the 2000s. This roadway links BV to the border town of Bonfim. Moreover, Brazil's federal government built an international bridge to Lethem—Bonfim's twin town in Guyana. At its inauguration, LdS signed several binational agreements and pledged support for Guyana's project to pave hundreds of kilometers of dirt road. This would extend the network to Georgetown and the coastal region (McGowan, 2009).

Therefore, future research on urbanization in Brazil's extreme north needs to engage with ongoing market-centric transnationalism. On the one hand, the Brazilian state is increasingly implicated in supranational territorial planning and, on the other hand, Brazilian migrants are introducing new sociospatial dynamics in both rainforest areas and the cities of the Guianas and Venezuela. Conflicts regarding conservationist claims and local development demands are topics also requiring further attention. This research can be both theoretically informed by and empirically enriching of broader discussions on neoliberal urbanism, planetary urbanization, and the shaping of new urban peripheries. We are aware that qualifying remote towns and emerging settlements in Roraima as new urban peripheries stretches the concept to a degree that some may not regard as valid. On a first look, these sites also appeared to us as worlds apart from the globalized spaces one finds in contemporary Manaus. Yet, by tracing uneven regional connectivity and relationality of places that are functionally-articulated-yet-marginalized, our intention was to invite urban researchers to broaden their scope of analysis and fully engage with the extensive implications of contemporary urbanization.

Acknowledgements. Our field research received support from Brazil's CNPq (Project No. 5755117/2008-5 coordinated by Professor José Aldemir de Oliveira from the Federal University of Amazonas) and a University of Miami 2011 Provost Research Award. Several students from the Federal University of Amazonas, State University of Amazonas, and Federal University of Roraima assisted with field research, particularly Ronan Gato, Susane Melo de Lima, Karina Felicio, and Marcelo Mendes Almeida. Christopher Hanson from the University of Miami provided technical support. All errors and omissions are the authors' sole responsibility.

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