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An Accessibility Limbo: Learning from Formal-Informal Practices in the Social Housing Complex of Ciudad Verde, Soacha

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Abstract: In Latin America, accessibility is increasingly becoming a priority in urban planning. Yet, looking closer and multidimensionally, its application tends to perpetuate socio-economic-spatial imbalances and segregation in the region by concentrating in few cities only. In addition, accessibility research and literature at the global scale usually over-focus on spatial and statistical analysis to the disregard of the concept's social and intangible dimensions—as is digital accessibility. Through the case study of the social housing complex of Ciudad Verde, Soacha—to the southeast of Bogotá, Colombia—, I contribute qualitative depth to the 'accessibility' concept by looking at it through its intersection with sustainability and the 'formality-informality' continuum (Lévy, 2020). Within the framework of a larger research project on urban sustainability in Ciudad Verde (which conducted focal group interviews and map-based surveys), I also place due attention on digital accessibility through Facebook. I recognize the platform as an accessibility tool for residents and use it as a research methodology. This diverse range of evidence revealed limbic elements hindering accessibility in Ciudad Verde. By using the resulting accessibility limbo as an analytical lens, this dissertation extracts lessons on how the Colombian complex can unleash its accessibility and sustainability. I argue that local (in) formal practices of access hold the clues for this; since they point at the missing pieces from a multi-scalar and multidimensional standpoint.

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Resumen: En América Latina, la accesibilidad está tornándose una prioridad en la planificación urbana. Sin embargo, si se mira de cerca y de forma multidimensional, al concentrarse en tan solo algunas ciudades su aplicación tiende a perpetuar desajustes y segregación socio-económica-espacial en la región. A su vez, las investigaciones y la literatura sobre accesibilidad a escala global normalmente se centran excesivamente en análisis espaciales y estadísticos, a expensas de las dimensiones sociales e intangibles del concepto — como lo es la accesibilidad digital—. A través del caso de estudio del complejo de vivienda social de Ciudad Verde, Soacha — al sudeste de Bogotá, Colombia—, aspiro a contribuir profundidad cualitativa al concepto de 'accesibilidad' al analizarlo a través de su intersección con la sostenibilidad y el 'continuo de formalidad-informalidad' (Lévy, 2020). Dentro del marco de un proyecto de investigación de mayor envergadura sobre sostenibilidad urbana en Ciudad Verde (que condujo entrevistas de grupos focales y encuestas de base cartográfica), también adjudico la importancia debida a la accesibilidad digital mediante el uso de Facebook. Reconozco la plataforma como una herramienta de accesibilidad para los residentes y también la aplico como metodología de investigación. Este diverso abanico de evidencia reveló elementos límbicos que obstaculizan la accesibilidad en Ciudad Verde. Mediante el uso de este limbo de accesibilidad como enfoque analítico, esta disertación extrae lecciones sobre cómo el complejo de vivienda social colombiano puede desencadenar su accesibilidad y sostenibilidad. Argumento que las prácticas locales de acceso, tanto formales como informales, contienen las claves para esto, ya que señalan a las piezas faltantes desde una perspectiva multi-escalar y multidimensional.

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I. Introduction

An emerging priority in urban planning (Martens, 2017), accessibility is the interaction between land use, transportation and communications systems, individual and household characteristics and the temporality of services and opportunities (Geurs & van Wee, 2004; Oviedo *et al*., 2020). Access to these can be granted or acquired by one's own means—with formality and informality working in a 'continuum' (Lévy, 2020) that enables such access. In turn, this continuum reproduces layers that can either be sustainable or not. Correlated with accessibility and (in) formality, sustainability is a social process that yields synergies between communities and their supporting ecosystems (James *et al*., 2013). Therewith, this dissertation tackles the intersection among accessibility, (in) formality and sustainability because, for formal-informal accessibility practices to be sustainable, their designs and operation mechanisms must engender a symbiosis among residents, livelihoods, and ecosystems.

Within this framework, social housing stands out for its transitory nature: into formal tenure, homeownership, different living typologies or an allegedly better life. Yet, when detached, disconnected, and underserved, these complexes can constitute accessibility limbos that frustrate this transition—fixating a deficient accessibility. Against this backdrop, my focus is Colombia's first-generation Macro-project of Social Housing (MISN) of Ciudad Verde (CiV), Soacha—to the southeast of Bogotá. By exploring CiV's accessibility practices along the formality-informality continuum (Lévy, 2020), this article aims to extract lessons on how to circumvent accessibility impasses and create more sustainable social housing.

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To offer a larger-scale background, Latin America's unequal distribution of inhabitants, opportunities and transportation (Vecchio *et al*., 2020) has yielded embedded inequalities, exclusionary mechanisms and threatened ecosystems. Nonetheless, in recent decades, mobility, and accessibility projects to tackle socio-spatial imbalances have increased. The progress achieved notwithstanding, this concentrates in few metropolises—perpetuating socio-economic-spatial inequalities and segregation in the subcontinent (*Ibid*.).

Moving on, research on accessibility—in LatAm and globally—tends to overrely on spatial and statistical analysis (Pérez *et al*., 2017; Oviedo & Titheridge, 2016), oftentimes at the expense of social and less-tangible nuances. This over-focus usually omits or treats as secondary the more qualitative accessibility strategies—as those recorded by Oviedo & Titheridge (2016) and Vecchio (2020). Along their work-lines and without disregarding space and statistics, I contribute qualitative depth to the concept of 'accessibility'—reclaimed by Lucas (2013), Lévy (2013) and Lucas & Uteng (2018). Furthermore, this dissertation also gives due importance to digital accessibility—significantly underexplored in the accessibility literature (Tranos *et al.*, 2013). In the 21st century and particularly in the physically-distant 2020, digital accessibility is essential for urban living and remote analysis—field research ruled out. With this, I apply an innovative information source and method for urban accessibility analysis: Facebook. An accessibility tool of Citoverdinos, the platform also lends itself as an invaluable research method (*Section 5*).

For its part, my context of study, Bogotá's unofficial Metropolitan Region (BMR), is not alien to regional accessibility trends. Since the 2000s, strong mobility and accessibility investments have been consecrated to improve the 8-million-inhabitants megacity. Nonetheless, these efforts were confronted by long-encroached urban trajectories (Lévy *et al*. 2017): exclusionary growth, privatization and metropolization. Sequentially, heavily dependent on the capital, adjacent Soacha was particularly affected by these. A national favorite for social housing, Soacha juggles with insufficient resources, exorbitant population growth, scarce opportunities, predominant informality, deficient connectivity, mobility and accessibility systems and a precious, yet threatened ecosystem.

Zooming in, CiV is set within these urban trajectories, perpetuating unsustainable tendencies that prejudice life quality, systematically disregard people's needs, and overload ecosystems. With over 200,000 residents (Acosta & Henao, 2011), CiV was planned as a city within a city. However, its unidimensionality hindered its accessibility (Escallón, 2011). CiV's untapped potential bred a rare urban ecosystem engulfed by an accessibility limbo in which residents' agency over the formality-informality continuum—*i.e.,* maneuvering over deficient access—is significantly undermined as against Soacha and other metropolitan municipalities. Pondering over how to unlock this limbo, this work argues that local (in)formal practices of access hold the clues for CiV's sustainability.

Departing from the above, this dissertation is organized as follows. The literature review (*Section 2*) discusses accessibility—including digital—, (in)formality and sustainability, framed within LatAm and Bogotá. Next, *Section 3* introduces CiV's limbo, locating it within metropolitan urban trajectories. After that follows the accessibility limbo as an analytical lens for more sustainable social housing (*Section 4*). Then, *Section 5* elaborates on the process followed to achieve my research objectives. Later, *Sections 6* and *7* elaborate on the specific and general lessons of the accessibility limbo, examining limbic elements and strategies to navigate these. Finally, *Section 8* culminates by stating practical and academic implications, limitations, and further research pathways.

II. Literature Review

a) *An intersection: accessibility, sustainability and (in) formality*

Scholars James *et al*. (2013) argue that the dimensions of sustainability—*i.e.*, ecological, economic, political and cultural—are all dependent upon a coalescence between the social and the natural. They argue that these dimensions are as-a-matter-of-fact social; with ecological sustainability understood as humans' integration in the environment. The understanding of sustainability as a social rather than a technocratic or economic issue (*Ibid*.) dissolves the tensions and contradictions arising across sustainability discourses—which often disguise neoliberalist logics (Flint & Raco, 2012; Bramley *et al*.: 2006; Burton, 2003; Polese & Stren, 2000). Rather, this social approach aligns the ecology with the economy, alongside cultural and political aspects. This enables a refined urban analysis that reciprocates the complexities thereof.

For its part, sustainability and accessibility are explicitly linked through the distribution *vs.* accumulation debate. Sustainability cannot coexist with the inequality excess that results from lacking access. Framed by scarcity laws and the needed nature-human balance; sustainability requires a careful consideration of resources distribution (James *et al.*, 2013). Current global levels of inequality come hand-in-hand with violence, mental and physical health repercussions and inefficient uses of environmental resources. Moreover, intersectional inequalities—across genders, ethnicities, and religions—frame unfair institutions, livelihood modes and results. Additionally, global imbalances impact citizens' opportunities, national action scopes, and international socio-environmental patterns (Pelletier, 2010; Holland *et al*., 2009; Boyce, 2008; Anand & Sen, 2000).

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This is how accessibility comes in. The ability to overcome space and get to a destination easily (Lévy *et al.*, 2017), accessibility also encompasses the capacity to fulfill one's own needs and aspirations through the inhabited environment. Thus, it relates to capabilities and equity (Oviedo & Guzmán, 2020). Matching sustainability's multidimensionality, accessibility operates at four interconnected scales (Oviedo *et al*., 2020). First, its macro scale entails land-use structures: locations, features and reproduction of demand and opportunities. The city and meso scale comprise transportation and communications: passenger and freight, travel demand by mode, digital connectivity, and locations, characteristics and reproduction of infrastructure and services. The micro scale covers individual and household characteristics: social position and reproduction of relations of class, gender, age, ethnicity, (dis)abilities, transportation mode selection, household composition, disposable household income and tenure security. Finally, services opening hours and available time for activities by identity markers and gender labor distribution belong to the temporal scale (*Ibid.*). A synergy between these four scales unequivocally leads to more sustainable urbanities.

This scalar nature elucidates that deficient accessibility translates into spatial, socio-political, economic (Heinrichs & Bernet, 2014) and psycho-emotional segregation. Against this, land use, activity clusters and access obstacles—*i.e.,* affordability, gender discrimination, disability, or age—should be targeted (Dávila, 2014). Aligned with sustainability, accessibility needs to address the roots of inequity and segregation. Thereby, sustainability and accessibility are correlated; affecting each other at each accessibility scale and sustainability dimension. That stated, there are many difficulties in devising reliable indicators to measure both concepts' contributions to cities (Miller, 2018).

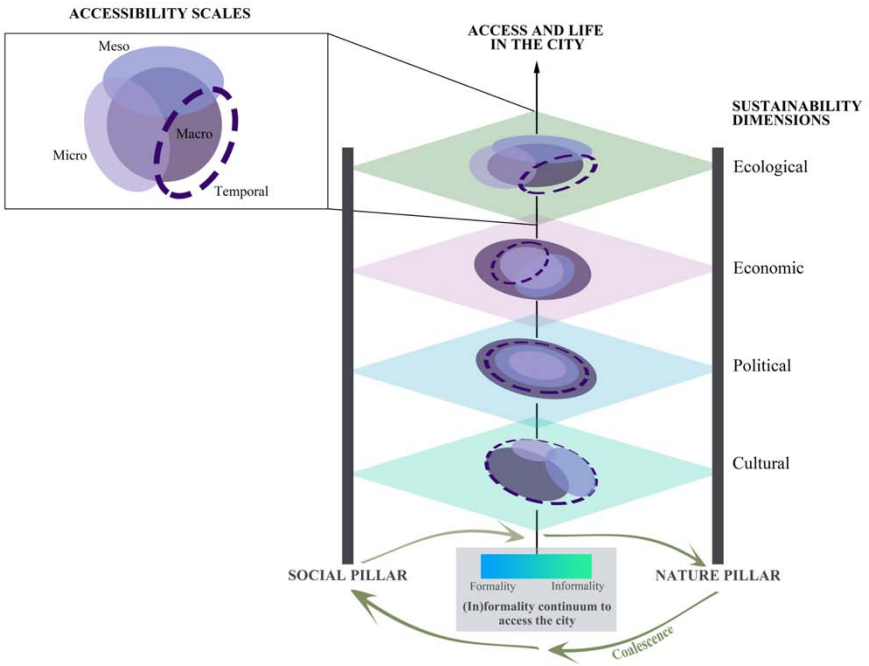
Nonetheless, the sustainability-accessibility correlation cannot be understood without accounting for (in)formality. Contained in one another (Tonkiss, 2013), formality and informality are intrinsically related to accessibility. To be comprehended, they should be analyzed in a continuum in which access to the city is granted or acquired by one's own means (Lévy, 2020). This continuum relates to the accessibility-sustainability correlation by pointing to systemic cracks and filling through them to render access—for there is no such thing as sustainable inaccessibility (James *et al*., 2013).

Additionally, a holistic outlook of sustainability enables it to transcend 'formal' legalizations, certifications and labelling as sustainability hoaxes. For formality withholds informal sustainabilities that simply cannot compete with formality's high verification costs (Vorley, 2017). Informality is usually condemned as inefficient, unsafe, tax-avoiding—and it can be so. Yet, oftentimes, it also offers accessibility and sustainability opportunities obscured by formality (*Ibid*.).

What is more, informality can contribute to inequality reduction, keeping many out of extreme poverty (Rogan & Cichello 2017). Insomuch as it fosters a mixed-use urban composition and accessibility through vicinity or networks, informality may also support sustainable urbanities. Regarding ecological sustainability, the (low-income) informal economy's footprints tend to be smaller than formality's: less electricity, packaging, and vehicular transportation to save on costs; in turn, reducing waste. Moreover, waste pickers and recyclers reuse and decrease greenhouse gas emissions (Chen, 2017). Yet, clouded by formality, informal sustainabilities tend to be disregarded. Thereby, the multi-scalarity and -dimensionality offered by the intersection between sustainability and accessibility, might be crucial to analyze the formality-informality continuum and learn from it—transcending the usual silos-based approach to (in)formality (Figure 1).

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Figure 1: Intersection among Accessibility, Sustainability and Formality-Informality



Source: Own elaboration.

b) Placing due importance on digital accessibility

Within the accessibility literature, only a few authors have addressed the digital realm (Tranos *et al.*, 2013). Outside digitally-developed countries, the disregard for digital accessibility is further exacerbated (Nagelhus, 2018). However, as opportunities and services, ICTs and the Internet are not evenly distributed among populations nor across space (Malecki & Moriset, 2008). Ours an increasingly digitalized world, this poses additional barriers to accessing city—all the more in a rapidly digitalizing, physically-distancing planet. Paradigmatic exceptions to this gap are found in Janelle & Hodge (1998), Wheeler & O'Kelly (1999)—who studied the early cyberspatial implications for accessibility—, and van Wee *et al.* (2012)—who revendicated the digital realm to strengthen accessibility. In 2000, Couclelis & Getis argued that the radical technological and societal changes brought by ICTs required a reconceptualization of urban accessibility at all scales.

Therewith, digital accessibility considerably matters when it comes to urban contexts and, especially, megacities. According to the literature, the digital world can reduce spatial frictions and distance costs (Cohen-Blankshtain & Nijkamp, 2004), optimize transportation (Sumalee & Ho, 2018), assist travel impendance (Dijst, 2004), reduce energy requirements for commutes (Noussan & Tagliapietra, 2020), benefit the environment through zero-emissions accessibility (van Wee *et al.*, 2012), increase supply efficiency to repurpose road space (Fernández-Redondo, 2016), among others.

Along this line, this dissertation places due importance on digital accessibility by using Facebook as a research methodology. In general terms, a careful literature review reveals that Facebook has been used to analyze participant retention in longitudinal research (Mychasiuk & Benzies, 2011), political engagement (Mallén, 2013; Tufekci & Wilson, 2012), access to education (Ciuffoli & López, 2010), to e-diasporas (Diminescu, 2012), and how the elderly and people with disabilities could better access the city (Rodríguez-Porrero & Gil-González, 2014). In LatAm, Facebook has been applied to research migrants' integration (Melella, 2016); access to environmental education (Badillo, 2017) and to culture (Laudano, 2016).

Yet, previous use of Facebook as a research method for the specific area of urban accessibility was not found, which constitutes a novelty of this work and a solid starting point for further research. The platform offers a lens into what scholars Tranos *et al*. (2013: 59) designate: "the accessibility of places from a digital perspective". Not only does Facebook lower the transaction costs of trading information and ideas (Cieślik & Kaniewska, 2004), but it also stands as an accessibility strategy to circumvent multidimensional lack of access (*Section 6*).

c) Accessibility in Latin America and Bogotá

Latin America the world's most unequal region; its disparities are marked by socioeconomic status,

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gender, ethnicity, age, and rural-urban gaps. These are owed to structural imbalances resulting from the uneven distribution of inhabitants, opportunities, and transportation systems (Vecchio *et al*., 2020). Despite advances since 2000 (Székely & Mendoza, 2015), there are deep-seated forms of inequality and exclusion, particularly related to mobility and accessibility (Deneulin & Sánchez-Ancochea, 2018).

In this context, mobility projects and research have recently been applying accessibility to tackle socio-spatial shortcomings and disparities (Vecchio *et al.*, 2020). These are consolidating LatAm as a blueprint for inequality-reduction (*Ibid.*). Relevant examples are the public transportation initiatives of Medellín (Dávila & Lévy, 2017; Brand & Dávila, 2011), Bogotá (Guzmán *et al.*, 2017; Rodríguez *et al.*, 2017), Santiago de Chile (Vecchio, 2017), Curitiba (Boisjoly, 2020) and Buenos Aires (Pucci *et al.*, 2019)—though inequality-reduction outcomes have been ambiguous (Vecchio *et al*., 2020). In fact, entire territories of the subcontinent are not object of accessibility-based research and indicators to inform policies, especially small-size countries (*Ibid*.). Also, accessibility and mobility data tend to concentrate in big cities, disregarding smaller, rural, and remote areas (Keeling, 2008; Vecchio *et al.*, 2020). What is more, most policies and research operate in the 'universal accessibility' dimension, which neglects aspects related to gender, age, ethnicity and (dis)ability (*Ibid*.).

In contrast to most of LatAm, Colombian cities had scant time to balance out migration, urbanization, and growth. Other cities (*e.g*., Buenos Aires or Santiago) grew slower and had more time to address issues as they emerged. Nonetheless, since 2010, Colombian cities like Medellín (Brand & Dávila, 2011) and Manizales (Escobar-García *et al.*, 2013) have considerably invested in accessibility, which now drives many of their infrastructure projects (Gutiérrez *et al*., 2012). For its part, Bogotá's mobility investments since the 2000s were committed to address socio-spatial imbalances (Vecchio, 2017) and improve the lives of its 8 million citizens—10 million in the metropolis (UN, 2018). In fact, over time mobility has been interlinked to the capital's identity and self-vision. For instance, the recognizable red BRT-system TransMilenio has contributed an image of an innovative, regenerated Bogotá, while becoming a beacon for other global metropolises (Vecchio, 2017; Wood, 2015).

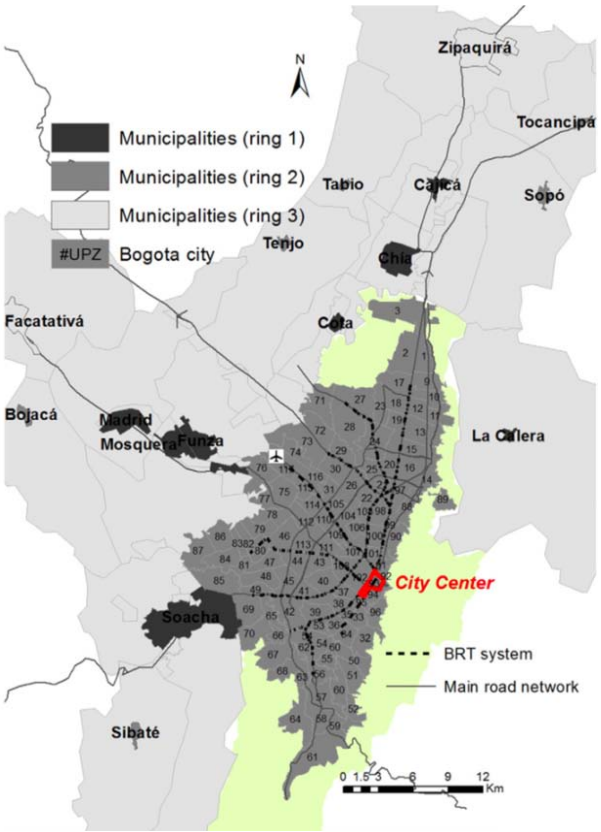
Nonetheless, Bogotá's mobility has failed to ensure accessibility for at least half of its residents (Bocarejo & Oviedo, 2012). This is all the more critical in a city with a consolidated and imbalanced distribution of inhabitants vis-à-vis opportunities: the south-southeast has the densest areas, while most opportunities concentrate in the north-centric zone (Oviedo & Guzmán, 2020). Furthermore, the political constraints precluding the officialization of the BMR entail that Bogotá continues to be planned independently from its adjacent municipalities. These are *de iure* independent, but most of them *de facto* dependent on Bogotá for operations, services, and opportunities—as is Soacha (Bocarejo & Oviedo, 2012; Vecchio, 2018).

III. Contextualizing CiV's Accessibility Limbo

a) *Soacha's accessibility disadvantage vis-à-vis the BMR's Inner Ring*

To the southeast of Bogotá and the BMR's Inner Ring (Figure 2), there is the municipality of Soacha—Colombia's eighth largest. With an official population of 634,660 (DANE, 2019), the municipal door-to-door census actually recorded over 1.3 million residents (El Espectador, 2019). The majority are low-income people coming from Bogotá after affordable housing (Maldonado, 2019). With exorbitant population growth rates, Soacha is also one of Colombia's main receptor cities of IDPs (55,000) and Venezuelan migrants (12,300) (Cortés-Ferrández, 2019). The city is further overloaded by disproportionate social housing (VIS); recently welcoming over 305,000 units (Periodismo Público, 2020).

Figure 2: The BMR's Inner Ring municipalities



Source: Guzmán et al., 2016.

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I have conceived a color-mapped accessibility comparison of the BMR's Inner Ring. With basic average calculations, Table 1 maps the municipalities highly above average (green), above average (yellow), below average (orange), and highly below average (red) for accessibility-related positive indicators (the lower the worse). Color-mapping is inversed for negative indicators (the higher the worse) (*e.g.,* unemployment rate). In contrast to the Inner Ring, Soacha is at a visible comparative disadvantage at many spheres: *e.g.,* job informality, total Unsatisfied Basic Needs (UBN), housing deficits or transportation cost to Bogotá. Soacha's comparative disadvantage illustrates the precarious accessibility context in which CiV is set.

Table 1: Sample of the color-mapped accessibility comparison between Inner Ring municipalities

	Total population	% Unem-ploy-ment	% Job in-for-ma-lity	Total UBN	Housing deficit		Ha. allocated to housing complexes		Popu-lation density (/km²)	% Houses with energy	% Houses with aqueduct	% House s with Internet	Net Primary education coverage	# Daily trips to Bogotá	Mini-mum time for car trips to Bogotá	Average daily transpor-tation expendi-ture to Bogotá (COP$)
					Qnt.	Qlt.	VIS-VIP	No VIS-VIP								
Cajicá	80,117	12.3	53.2	3.15	859	207	11.84	33.16	18,115	100	99.1	54.82	99.13	15,001-25,000	34-58 min/28 km	$4.100-$6.500
Chía	128,038	12.7	58.6	2.93	2,451	624	6.28	1067	18,717	98.8	99.4	66.52	94.44	25,001-45,000	28-42 min/22 km	$3,600-$6,100
Cota	31,102	9.3	60.5	4.02	629	195	0	95	6,884	100	91.7	65.67	254.96	25,00-145,000	32-40 min/16 km	$4,700
Funza	90,732	9.5	47.5	3.24	1,613	885	20.63	23.37	15,002	100	99.3	50.37	108.40	15,001-25,000	41-50 min/22. 6 km	$3.446
La Calera	28,225	14.4	63.9	3.08	122	136	1.7	27.3	1,008	100	99.1	61.98	131.27	5,001-15,000	38-45 min/23. 3 km	$3.500-$7.000
Madrid	109,414	12.2	73.2	3.51	1,257	1,262	0.58	20.42	10,632	100	100	54.65	98.68	15,001-25,000	54-60 min/-9.8 km	$5,900
Mos-quera	78,658	17.7	65.3	3.40	1,165	1,005	12.83	29.17	14,196	100	100	45.00	118.61	25,001-45,000	47-59 min/26. 1 km	$3.446
Soacha	634,660/1. 3 m	14.8	70.4	5.30	15,431	8,703	263.4	37.63	40,200	99.6	89.01	39.15	90.35	>251,000	60-90 min/25. 9 km	$5,000-$7,000
Bogotá D.C.	7.413 m	10.6	42	3.36	161,558	105,889	NF	NF	47,791	99.9	99.5	74.6	97.9	>521,000	N/A	N/A

Source: Own elaboration based on governmental statistics.

With insufficient public funds and predominant informality (Oviedo & Dávila, 2016), Soachans have precarious access to health, education, transportation, culture, and nearby jobs (Espinosa-González, 2014). Moreover, connections to Bogotá are limited, and overcrowded by over 251,000 daily commutes to the capital for work or day-to-day operations. The lack of efficient, affordable, and accessible mobilities, a deteriorated road network, and big commuting distances (25.9 km) further hinder these trips (García-Pulido, 2015). Therewith, Soachans are socio-economically excluded, with constrained access to cognitive, organizational, and physical skills (Oviedo & Dávila, 2016).

In parallel, national and Bogotanian imaginaries associate Soacha with poverty, bad governance, and pollution (Dávila, 2012). Nonetheless, as one of Colombia's largest industrial hubs, Soacha's vision is set to change. The city's new mayor Juan Carlos Saldarriaga aspires to increase local accessibility and decrease the excessive dependence on Bogotá. Thus, he rejected the CiV II project and its 200,000 VIS units (El Tiempo, 2020), since Soacha already lacks schools, roads, security, transportation, and other public equipment (El Tiempo, 2020). He intends for the project's 900 *fanegadas* to house an industrial corridor instead—increasing local services and jobs. Nonetheless, the environmental impact of such project, which would expand over neighboring ecosystems, should be taken into consideration (Section 6.4).

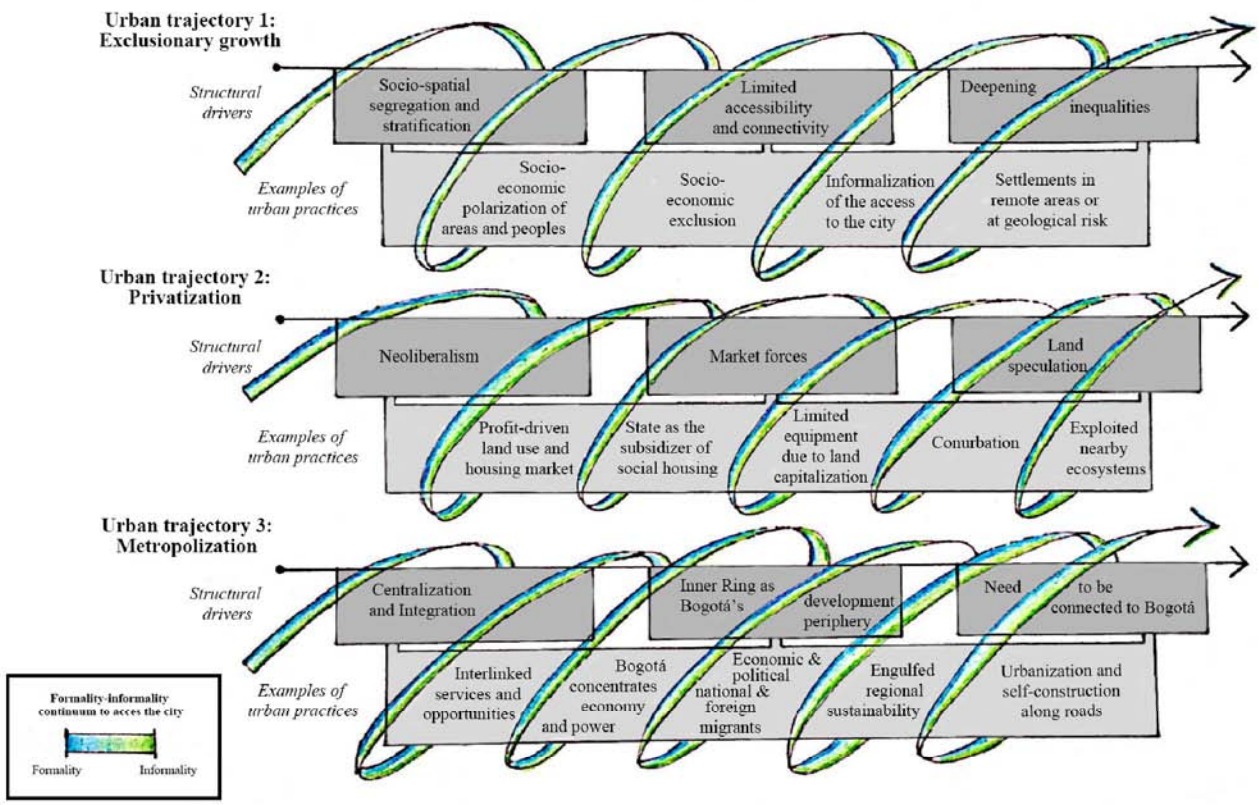
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b) The BMR's urban trajectories and their impact on CiV

Concerned with sustainability, the BMR's urban trajectories, structural drivers and urban practices should be identified (Lévy *et al.*, 2017). Moving beyond 'sustainability fixes' (*Ibid.*: 7), this will elucidate the gaps that CiV reinforces—enabling a deeper analysis of the posited accessibility limbo.

That stated, the weight of informality on Colombia's economies (33.5% GDP (≈COP$294 trillion/ USD$80.5 million) (Anif, 2017) rules out divorcing urban trajectories from the informality that significantly feeds them. With powerful vested interests, urban trajectories determine the course of cities—in the benefit or prejudice of sustainability. Yet, the informality-formality continuum carries forces that interact, influence, and morph those trajectories (Figure 3).

Figure 3: Interaction of the BMR's urban trajectories, drivers, practices and the formality-informality continuum



continuum

Source: Own elaboration.

The author identified three BMR's urban trajectories that have been taking and giving shape for decades: exclusionary growth, privatization and metropolization (Figure 3). First, the *exclusionary growth* trajectory is driven by remarkable socio-spatial segregation and exacerbated by Colombia's stratification system, which has polarized—and hierarchized—citizens and neighborhoods within collective imaginaries.

Yet, this trajectory needs to be explained together with *privatization*. Predominantly driven by market forces, Bogota's growth has engendered structural problems across the BMR (Tarchópolus & Ceballos, 2003). The city-region seems to follow an incongruous path of integration paired with exclusion and informalization (Bayat, 2004). This is further exacerbated by deepening inequalities and predatory neoliberalism—as was the privatization of social housing in the 1990s, with the State assuming a subsidizer role (Alfonso, 2019). Moreover, land speculation has reduced public space, equipment, and road networks to a minimum to derive the maximum benefit (Tarchópolus & Ceballos, 2003). Sequentially, these profit-oriented trajectories and their spill-over effect across the Inner Ring come at the cost of regional ecosystems and sustainability.

Thirdly, changes in the 1970s national economic and demographic structures affected the shape and course of Colombian cities through *metropolization*. Since then, neuralgic centers like Bogotá have gained ever-more importance by concentrating economic activities, opportunities, and people (León & Ruiz, 2016). In fact, Bogotá attracts unparalleled economic and political migrants from

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Colombia and neighboring countries (*Ibid*.). It is also the unrivalled decision-making seat of the centralized Andean nation—accumulating power. These dynamics have constituted the Inner Ring as Bogotá's 'development periphery' (Amin, 1997). In turn, dependence pushes the Inner Ring to focus on its connectivity to the capital, oftentimes at the expense of local networks and accessibility (Oviedo & Dávila, 2016).

Common to these three trajectories, since the 1940s, low-income families resorted to peri-urban self-construction to access opportunity-providing Bogotá. This was driven by profit and the need of connection to the capital—urbanization mainly happening along or near roads (Tarchópolus & Ceballos, 2003). In this manner, formal and informal housing have interacted in developing the BMR—according to the course set by urban trajectories.

Interestingly, Bogotá's and Soacha's urban trajectories are at odds with their visions. There is a tension between the metropolis' aspirations and its residents' needs. Indeed, Bogotá's self-vision as modern, democratic, and inclusive, still leaves many behind. It is only through informality that many can access the city. For its part, Soacha aspires to become a burgeoning industrial center, but its structural drivers and practices have been extreme poverty, informality, accelerated population growth and urbanization, settlements in geological-risk areas, corruption, weak governance, and tax-base, and technical-financial scarcity (Dávila, 2012).

With this, CiV operates along these three trajectories; adversely affecting its own accessibility, sustainability and (in)formality dynamics. The MISN disregarded criteria in land-use planning and harmed the territory—breaking away from its original ecological vision (Méndez *et al*., 2014). Furthermore, its neglected accessibility and unidimensional approach to housing locked residents in an accessibility limbo (Section 6). Social housing should seek to tackle the BMR's widening inequalities between socio-economic strata. Yet, by disregarding accessibility's multi-scalarity and sustainability's multidimensionality, CiV perpetuates structural conditions that determine who benefits and who bears the burden of Bogotá's urban development—with the leveraging of the formality-informality continuum eroded by CiV's design, location, and under-equipment.

c) CiV's Accessibility Limbo

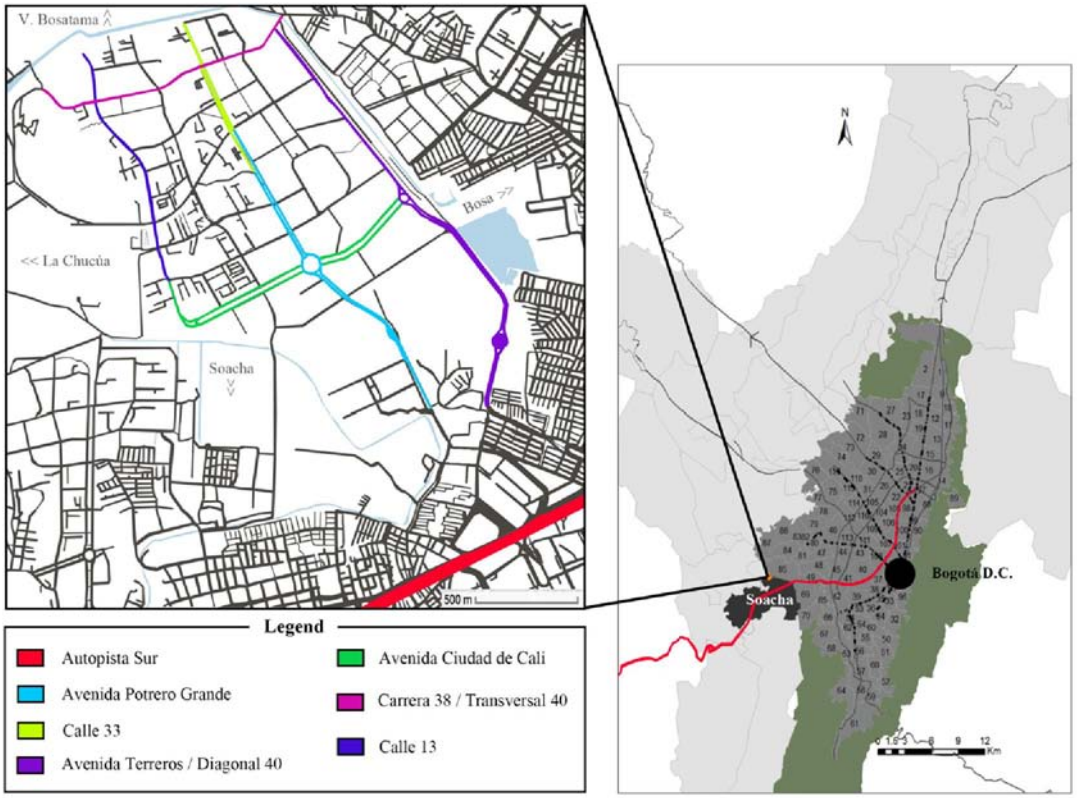
The MISNs were a national-level response to the 2008 financial recession (Alfonso, 2019) and to Colombia's target on social housing provision. They combined planning instruments, land management and financing to affect the territorial development of geostrategic areas (Law 1151, 2007). Despite a strong social policy and political momentum, the MISNs were declared unconstitutional in 2010, for they contravened municipal competences and other legal considerations (Méndez *et al*., 2014). However, due to retroactivity, unconstitutionality could not stall the already-adopted 13 MISN.

Mostly located in peripheries, first-generation MISNs are also practically disconnected from urban centers, offering monotonous, serial housing (Escallón, 2011). They share flaws regarding financing, execution, and equipment. Market-guided, the MISNs only benefit households with a minimum purchasing power—disregarding where housing deficits concentrate. This partially explains why they have only marginally affected housing deficits (*Ibid.*). A decade later, most MISNs have accelerated gentrification, migration, and conurbation, since they break many territorial logics and do not consolidate structuring complexes (Escallón, 2011). Overall, they have also negatively impacted land-use planning, promoting urban expansion beyond the carrying capacity of ecosystems (Méndez *et al.*, 2014).

For its part, the CiV MISN is in Comuna 3, northern Soacha. Adjacent to Bogotá's locality of Bosa, CiV covers a 328-hectares area between Calle 13 westwards to Terreros Avenue (including Carrera 38 into Bosa and *vereda* Bosatama), and from Ciudad de Cali Avenue northwards to Carrera 40 (Figure 4). Driven by neoliberalist logics, the Macro-project has been developed (2009-2020) by a corporate conglomeration led by the Amarilo construction company—its total cost undisclosed.

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Figure 4: CiV's location within the BMR and its main roads



Own elaboration, adapted from Guzmán et al., (2016) and Google Earth.

By law, CiV had to allocate 50% of its terrain to VIS and 25% to priority-interest housing (VIP). Instead, 65.61% of CiV is residential (c.200,000 people in 55,000 apartments in 25 compounds), yet only half are VIS or VIP (Acosta & Henao, 2011). As other MISNs, CiV minimally impacted quantitative housing deficits (*Ibid.*). The project considered Soacha's and Bogotá's total deficits (24,134 and 267,447 respectively) (Sisbén, 2015), but leaving out the lowest-income families precluded more compelling results (Escallón, 2011). For its part, CiV disregarded Soacha's significant qualitative housing deficit (8,703) and overcrowded homes (20,649) (PNUD, 2009).

Regarding urban equipment, 57 hectares have been used for public and green areas including a boardwalk network and 9-km of cycle-routes. In addition, CiV has three small shopping centers, two public schools and a private one—overall insufficient for the 30,000 people in schooling age (Pulido-García, 2015) (Figure 5). Moreover, by mid-2021, CiV will welcome a National Learning Service (SENA), which will train 122,000 apprentices/year (Alcaldía de Soacha, 2019).

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Figure 5: Land use in Ciudad Verde

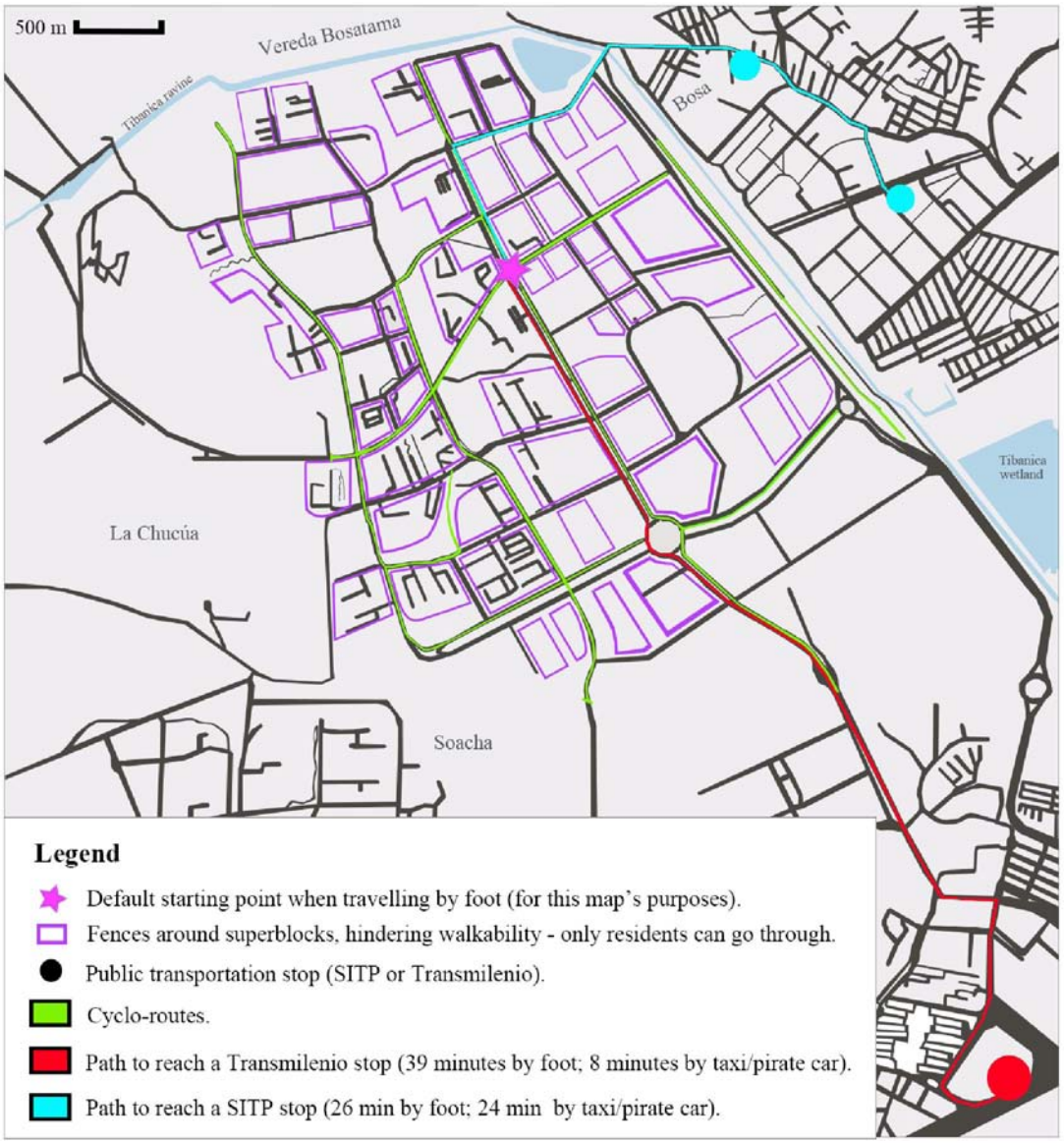


Own elaboration, based on Maptionnaire Survey (Section 5) and Google Maps.

In terms of connectivity, CiV is poorly connected to both Soacha and Bogotá. Residents need to walk over 30 minutes or take a taxi or pirate transportation to access the Transmilenio in Autopista Sur or the Integrated Public Transportation System (SITP) in Bosa (*Figure 6*). However, by 2024, the widening of both Avenida Ciudad de Cali and Terreros could welcome TransMilenio backbone services (El Espectador, 2019).

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Figure 6: Mobility in CiV



Own elaboration. Sources: Ibid.

As have other MISNs, CiV stimulated urbanization over farming and flood-prone areas, which considerably impacted the city-region's ecological structure (Méndez *et al*., 2016). Strategically located between Bogotá and Soacha, CiV was partly designed to forestall potential self-building (Espinosa González, 2014). Yet, it strengthened conurbation tendencies, setting new *de-facto* borders. Moreover, its surface area (previously rural) increased by 23.5% the urbanization of Soacha, imposing significant duties upon an already-overwhelmed municipality (Acosta & Henao, 2011).

In line with this, prior to the declaration of unconstitutionality, Amarilo and Bogotá had agreed to assume the costs of basic public services and equipment. Capitalizing on this absorption, the project became denser with housing. Despite Sentence 226 (2014) allowing to complete MISNs in-progress, the breach of municipal competences was reversed. This meant that Soacha—financially unstable—remained solely responsible for basic and urban services provision for a project of such scale (Pulido-Moreno, 2014). Delayed delivery and deficient quality and design engendered an accessibility vacuum—set by the

IV. Analytical Framework: A Multidimensional Accessibility Limbo Ensnaring CiV

This analytical basis will guide the testing of my hypothesis which sees CiV as ensnared by an accessibility limbo, to thus understand what we can learn from (in)formal practices of accessibility and unleash the sustainability potential of the MISN. In the feminist literature, 'limbo' is used to describe a fixated

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and locked situation in which a group of people wait for a better life (Conlon, 2011; Mountz, 2011). I use the term 'limbo' conscientious of its establishment of a settled relationship between fixity and motion, which lets me better observe the intersection among accessibility, (in)formality and sustainability in CiV.

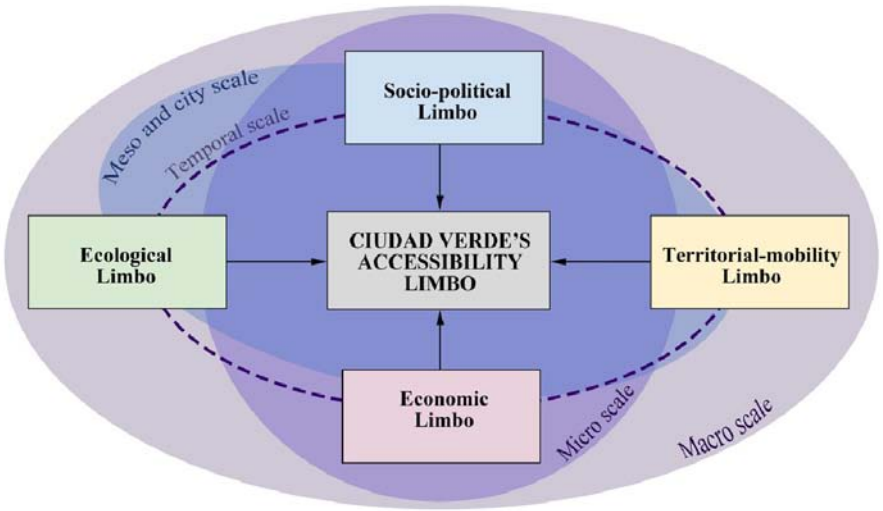
Other metropolitan and Soachan residents—be them in formal or informal areas—have relative maneuvering over the formality-informality continuum, using it to their own advantage and, need it be, redefining their access to the city (Lévy, 2020). Due to their isolated location, low incomes, deficient accessibility and mobilities, ownership burdens and insufficient community organization; Citoverdinos' agency over the continuum is limited—their formality-informality practices constrained. Therefore, the limbo ensnaring CiV is, indeed, a *multidimensional accessibility limbo*.

In anthropology, liminal forms of living—between accepted social categories, norms, and expectations—are interpreted as threatening to the social order (Cresswell, 1996). "Their embodied roles are in a process of uncertainty, transformation and flux, and powerful social actors are not entirely able to exert control" (Brun & Fábos, 2011: 10). This reflection offers insights about society's general dismissal of informality, with its anxious lack of control manifested in different forms: marginalization, criminalization, segregation, disregard, paternalism, among others. Threatened by liminality, states strive to regulate, eradicate, or allow (on their own terms) such forms of living and acting. The social housing figure in Colombia is part of those instruments, and its narrow understanding of informality—disregarding its multidimensionality and the continuum in which it operates—constitutes exceptional urban geographies. Fixating informalities in space—allegedly *formalizing*—, CiV's unidimensionality engenders a limbo, where the multiple dimensions in which informality may ensue to respond to lacking access go unaddressed.

Such an approach overrides the catalytic properties of social housing (Escallón, 2011). It fixates families in environments non-conducive for them to access the city, its opportunities, and the lives they have reason to value (Sen, 1999). A relevant caveat to make is that my theorization of limbo represents a *collective handicap*. It is not to say that no individual would succeed or is succeeding to materialize good quality of life there, but that *some of CiV's designs and structural conditions* are a hindrance in themselves. With vigilance, this work aims not to reproduce a passive and voiceless subjectivity of CiV's residents or other MISNs'. This is an urban issue to be addressed due to residents' entitlement to social housing that constitutes a springboard.

Furthermore, a feminist view of informal accessibility practices does not only allow to identify gendered distortions—*e.g.*, access to resources and opportunities, division of labor and use of urban space––but also accounts for their creativity and lessons taught in the face of exclusionary urban forces (Brun & Fábos, 2011; Conlon, 2011; Mountz, 2011). With this, to unlock limbo, one must first unpack it. Intrinsically related to Lévy's continuum, the author identifies different dimensions to CiV's accessibility limbo: territorial-mobile, socio-political, economic, and ecological (Section 6). These negatively interact with sustainability dimensions and the formality-informality continuum to constitute a limbo.

Figure 7: Ciudad Verde's Multidimensional Accessibility Limbo



Own elaboration.

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V. Methodology

As aforementioned, this research seeks to provide insights on the intersection among accessibility, (in)formality and sustainability in CiV in the face of a limbic design and context. With that, the main research question underlying this dissertation is: *What can be learnt from CiV's formal-informal strategies of accessibility, to unlock the accessibility limbo and constitute more sustainable social housing?*

Table 2: Methods applied

Evidence	Type	Producer(s)	Time frame	# of respondents	Method of Analysis
Literature	Secondary-Academic	Bibliography	1962-2020	N/A	Literature review (Pacheco-Vega, 2019)
Newspaper articles	Secondary-Informational and investigative	El Espectador, El Tiempo, Periodismo Público, Soacha Ilustrada	2015-2020	N/A	Idem
Grey literature	Secondary-Statistical and cartographic	Government statistics	2005-2019	N/A	Cross-tabulation (Momeni *et al.*, 2017)
4 Focal group interviews	Secondary-Qualitative	University of Los Andes and UCL	2019	7-10 per group	1) Narrative (Holstein & Gubrium, 2012) and discourse analysis (Gee, 2010); 2) Classification by limbo dimension; 3) Identification of elements, strategies and proposals; 4) Photoshop graphics
14 public Facebook Groups	Secondary-Qualitative, spatial, photographic and video	CiV residents	01/2019-08/2020	N/A	Idem
4 private Facebook Groups	Idem	Idem	Idem	N/A	Idem
"Descubriendo Ciudad Verde" Maptionnaire Survey	Secondary-Quantitative and spatial	Idem as focal groups	2020	367	Descriptive and inferential analysis (Blaikie, 2003)
Metropolization and Residential Segregation Survey	Secondary-Quantitative	Moreno & Rubiano, Universidad Piloto de Colombia	2014	245	Idem
Interviews to urban and housing experts	Primary-videocall	Author and interviewees	2020	3	Collation of results to date

At an early stage, this work was fed by a wide range of sources including academic, newspaper articles and grey literature—examined through literature review and cross-tabulation, respectively. This also enabled to establish Soacha's comparative disadvantage vis-à-vis other Inner Ring municipalities (Section 3.1). Second, I examined four focal group interviews and a Maptionnaire survey conducted for a UK-Pact project led by University of Los Andes and University College London. Interviews were analyzed through narrative and discourse analysis—identifying limbic elements, accessibility strategies and proposals. Additionally, this was complemented by the quantitative-based Metropolization and Residential Segregation Survey (Moreno & Rubiano, 2014). Both surveys were analyzed through a descriptive and inferential process.

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Although recently, Facebook has been used as a research methodology (Section 2.2). However, to the extent of my literature review, it has not been applied as a methodology or source for analyzing urbanities and accessibility thereof. A review of usages for other fields of study informed its translation into this dissertation's scope. Therewith, I reviewed 18 Facebook Groups of Citoverdinos (Annex 3)—analyzed as the focal group interviews. These displayed significant strategies, which allowed me to grasp—to an extent—the everyday accessibility experience in CiV and test the validity of the limbo.

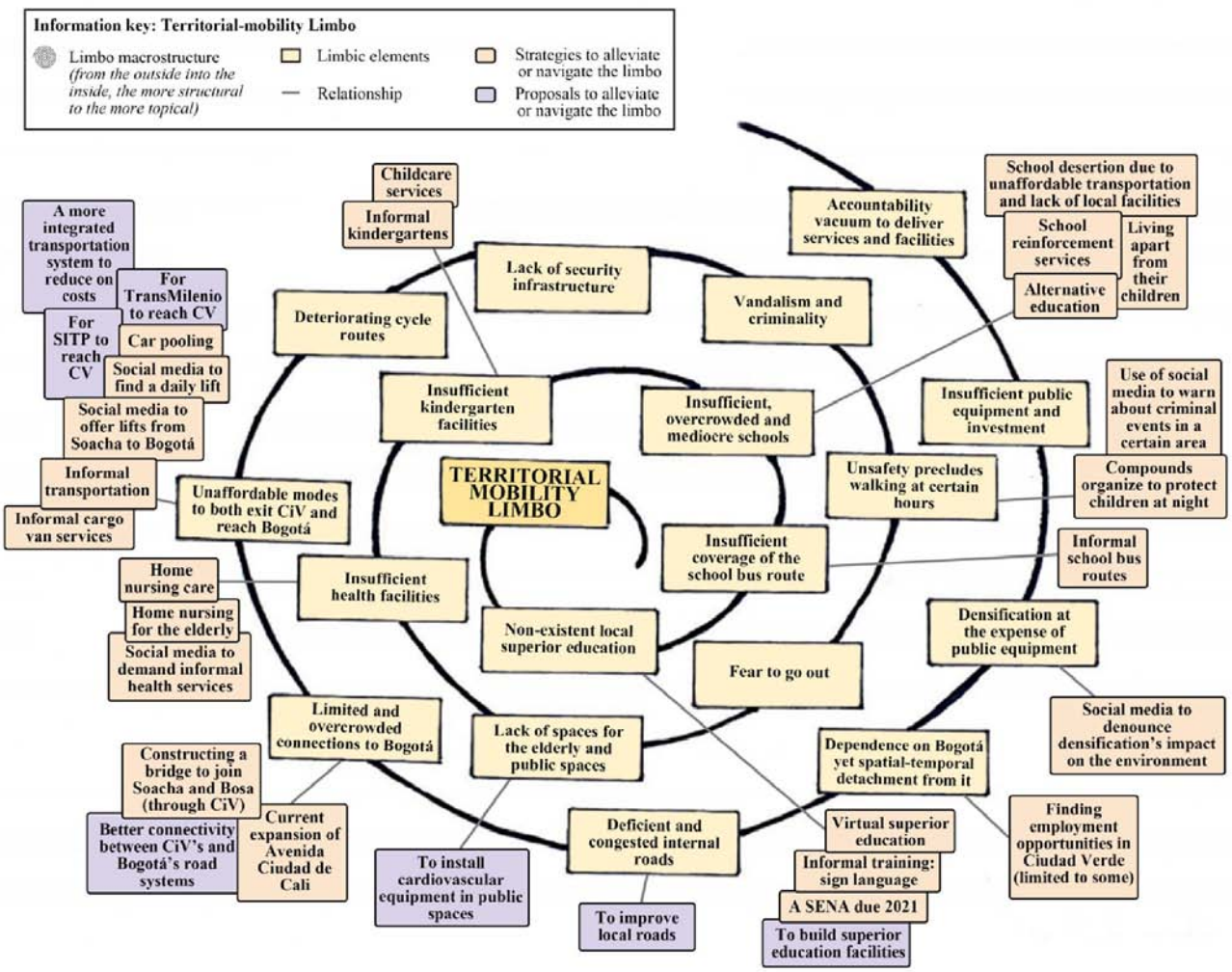
Moreover, maps, graphics and tables were conceived to better display my analysis, narrative, and findings. Last, interviews with three urbanism and housing experts were conducted. The interviews lasted an average of 50 minutes, were anonymized, audio recorded, and transcribed in Spanish. They included conceptual questions to collate results to date.

VI. Findings: Roots and Routes to Unlock CiV's Accessibility Limbo

The following subsections will introduce the findings for each limbo dimension (territorial-mobile, socio-political, economic, and ecological), elaborating over their constitutive elements and Citoverdinos' strategies and proposals to alleviate these. All limbo-relevant information and direct quotes throughout these subsections were said by anonymized residents on the 18 Facebook Groups or at the 4 focal group interviews (Section 5). The most illustrative quotes have been included in the body text to bring their voices to the fore (own translation Spanish-English). For its part, each limbo graphic is based on the aforementioned information, and has been represented through spirals; whose outsides build from structural into topical limbic elements.

a) Territorial-mobility Limbo

Figure 8: Territorial-mobility Accessibility Limbo



Own elaboration.

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The MISN's declaration of unconstitutionality yielded an *accountability vacuum* that kick-started a territorial-mobility limbo (Figure 7): "Bogotá builds the road up to a certain point; then, it's Cundinamarca's responsibility". Without a clear delivery authority, most projects stall or suffer considerable delays. Moreover, the overcharging of Soacha with providing urban fittings translated into *insufficient equipment and investment.* That stated, CiV satisfies proximity access to banks, supermarkets, restaurants, and local shops (Figure 5).

For its part, CiV's *excessive densification* emanates from the privatizing trajectory, yielding a segregated space within a peripheral municipality. Residents report: "they filled all the space and only afterwards they started to provide for needs," and "they keep selling apartments here despite the problems we face daily". Residents warn through Facebook about densification's repercussions: "[The POT] doesn't include the municipality's ecological structure […] and ignores strategic ecosystems like the high-Andean forest and the sub-xerophyte enclave". They also oppose the CiV II project and demand present issues to be tackled before further building.

Furthermore, *CiV's dependence on Bogotá reaches an impasse due to its disconnection and distance* (27.63-km) from it: "From here to Bogotá, I need 2-2.5-hours". This is aggravated by the high centralization of opportunities and services in north-centric Bogotá, and by CiV's poor local accessibility and *road system,* where "everything ends up jammed". Such spatial-temporal detachment hampers integration both internally and within Soacha.

With *only two exits into main roads* (Figure 10), *overcrowded connections to Bogotá* (Figure 11) have some residents "[leaving] the house at 3-4 am so as to go to work". Ongoing yet slow projects are the direct link CiV-Bogotá (extension of Ciudad de Cali Avenue) and the additional connection CiV-Bosa to relieve the San José exit (bridge over the Tibanica ravine). Moreover, many seek employment in CiV, but nearby jobs are very scant (Section 6.3). Thus, residents propose a local employment hub, improved roads to avoid bottlenecks, and better connections with Bogotá's transportation system.

The deficient connectivity has also yielded *unaffordable transportations to both exit CiV and reach Bogotá,* since "you always need to take two transport modes, at the very least," and "the outward trip to Bogotá alone is almost $7,000". Citoverdinos spend an average of 20-25% of their incomes on transportation only (Moreno & Rubiano, 2014); which considerably contrasts with the transportation expenditures of 5-6 strata (6.5%) and 1-2 strata (12.2%) housing in Bogotá (SDM, 2011).

To navigate this territorial-mobility limbo, residents use strategies such as carpooling, informal transportation and cargo vans. Many use pirate transportations for lack of other options, which usually comes with reckless driving, old, polluting, and unsafe cars, and fluctuating fares. They state: "we are too many in CiV and legal transportation cannot keep up". A further strategy is to offer and find lifts to Soacha or Bogotá via Facebook. Residents propose more integrated fares to reduce costs and for TransMilenio and SITP to reach CiV: "with that, we would get rid of these many cars, and this much pollution".

Currently, CiV's *cycle-routes are deteriorating*—with maintenance accountability unclear. Moreover, commuting distances and criminality impede biking from becoming predominant. Residents declare to also *lack security infrastructure* (policemen and firemen). Connected to this, *vandalism and criminality* have increased over time—equipment frequently damaged. Along this line, residents assert that *after a certain hour, one cannot walk* through Terreros Avenue, "because one would not arrive home". Likewise, some people assert a *fear of going out* at night since "insecurity is very high". To tackle this, some compounds "set up sirens, and after 8 pm no kids are seen around". Additionally, through Facebook, they report crimes in a certain area or advice about dangerous routes.

Furthermore, there are *scarce areas for the elderly and public spaces,* and as some declare, "the fact that we're over 50 doesn't mean we live stuck at home". Conceived as the sum of closed compounds, CiV's spatial morphology with large public spaces was nullified by the precluded articulation between residential and public spaces. Its fenced superblocks of up to 200 meters in length thwart community interaction, permeability, accessibility, and walkability (Méndez *et al.*, 2014) (Figure 6). Moreover, the design of residential units disregarded mobility-impaired persons: "the spine, the heart… something that doesn't let them climb the stairs". As a result, many stay at home. With this, some elderly residents express a feeling of abandonment and lacking social integration, and propose that cardiovascular equipment be installed outside, for them to take care of their health.

Regarding services, CiV also suffers from *insufficient health facilities.* A hospital was projected in 2012, yet "8 years have passed, and no first brick has been layed down". This extends to Soacha, which lacks health infrastructure to provide for its population. To alleviate this limbic situation, residents find home nursing care and informal health services through Facebook.

With regards to education, *the existing kindergarten is not enough.* Some residents have resorted to childcare services, while others "rent the social areas on the 2nd floor and set kindergartens there". However, these do not satisfy the demand. In terms of schools, facilities and coverage are scarce in both CiV and Soacha, with *some schools being considerably overcrowded:* "only one teacher for 55-56

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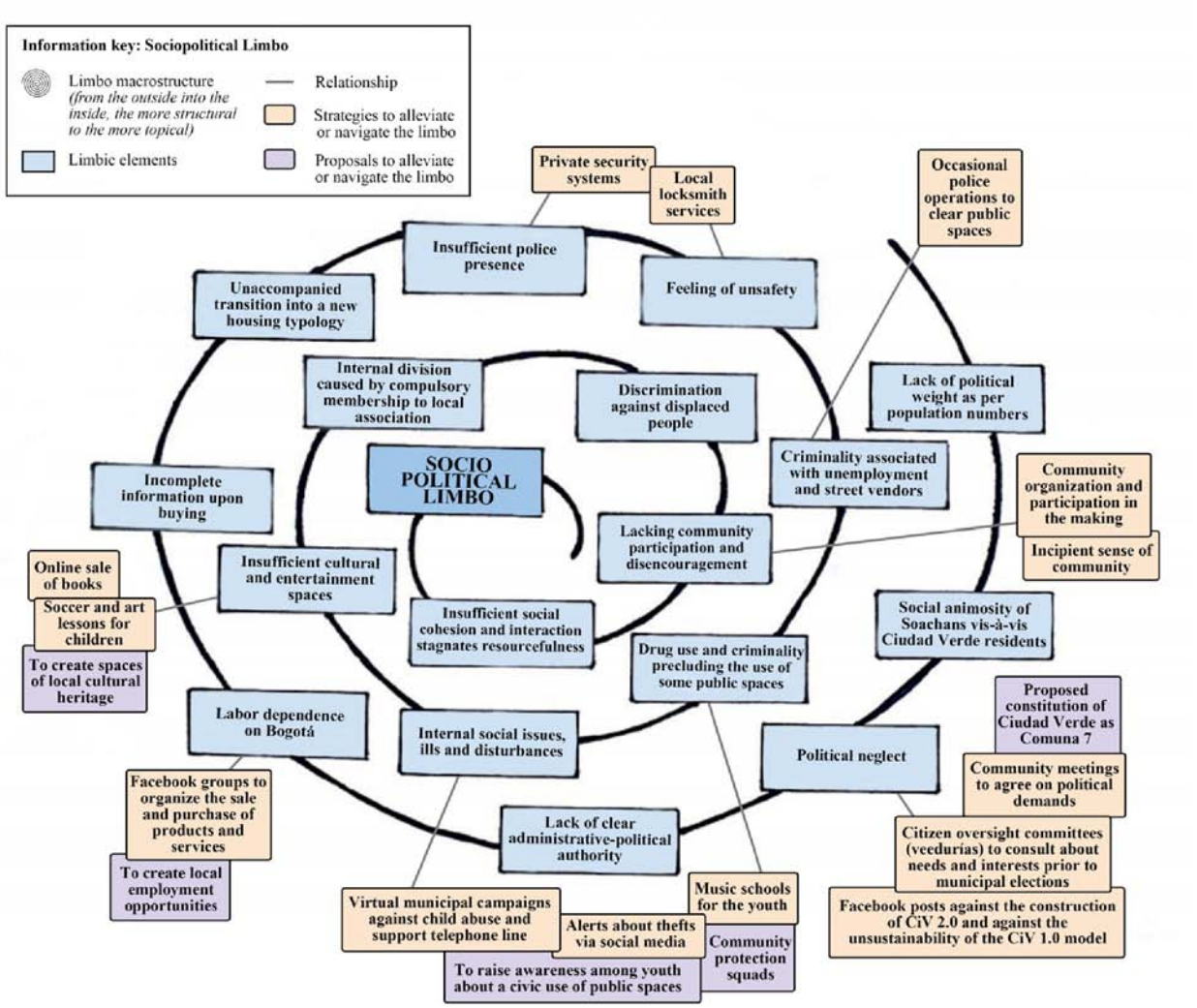
kids". The combination of these factors has constituted a *mediocre local education system.* Furthermore, an important mismatch was the opening of a bilingual private school (Figure 6), which most residents cannot afford.

Nonetheless, residents have designed strategies for this. First, some parents have opted for having their children live and attend school in Bogotá: "one must break off from their kids and goodbye. Deal is to be a parent on Sundays". Second, there are alternative education options (sport or artistic training), yet not formally recognized. Third, should a place at a local school be available, some choose to compensate its low-quality with tutoring. Conversely, certain families take their children out of school due to the unaffordable transportation costs (COP$7,000-8,000/day). In this line, the *school bus route offer is also meager.* When places are filled, parents must pay extra for independent services or mainstream transportation. Advertised via Facebook, some bus drivers and car-owners organize informal routes to fill in the accessibility limbo.

With this, the higher the education level the lesser the local opportunities. According to the CiV-relevant data of the Metropolization and Residential Segregation Survey (Moreno & Rubiano, 2014), only 5% Citoverdinos have had superior education, which compares to Bogotá's 13.7% (ME, 2006). CiV *lacks local superior education centers,* and the youth are constrained to Soacha's scarce offer, or to travel expensive distances to Bogotá. Alternatively, Facebook groups advertise trainings for youth and adults (*e.g.*, sign language education) and virtual superior education. Moreover, a vocational training facility (SENA) is projected for 2021. Nonetheless, residents still demand for a university to be built *in situ*. With education, "we'll be capable of mitigating many other issues".

b) Socio-political Limbo

Figure 9: Socio-political Accessibility Limbo



Own elaboration.

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CiV's sociopolitical limbo (Figure 10) originates in its profitability maximization through additional housing. This increase was not matched with *the pertinent political weight:* "they hardly take us into account [in Soacha], especially regarding mobility, security and education". Thereby, residents push for CiV's constitution into "Comuna 7 as a binding territorial entity within the municipality". This would not bring political clout but could potentially create arenas to address CiV's issues (Gómez-Flórez, 2020). Moreover, CiV's infrastructural housing advantages vis-à-vis Soacha have generated *social animosity.* This impacts Citoverdinos' sense of belonging and misrepresents their social fabric—myth having it that CiV "is inhabited by Soacha's jetset".

The lacking political weight goes hand-in-hand with *political neglect.* Residents declare that CiV is disregarded under the mistaken belief of being a sustainable city. This limbic situation is marginally addressed by *ad hoc* community meetings and pre-electoral citizen oversight committees (*veedurías*) to consult and discuss needs. Moreover, some denounce CiV via Facebook as "an unsustainable, non-productive city, merely created to sell houses". Additionally, residents demand more political representation, yet reflect an *unclear idea about their political-administrative authority*.

Aligned with the territorial-mobility limbo, CiV's insufficient local accessibility has led to *high labor dependence on Bogotá,* where "at the lowest, over 75% of our population has its job". To untangle this, Facebook Groups enable to purchase and sell products and services, access to informal employment, among others (Section 6.3). Naturally, residents aspire to local employment being generated, for "everything works out when people have good financial sustainability and time available".

Overall, Citoverdinos express discontent at the *incomplete information received upon buying* their apartments. They claim that: "no one mentioned the administration fee" and neither the expensive public services. The later resulted from the privatization, stratification and legal changes undergone by CiV. In line with this, *residents were not accompanied* at the socio-technical, psycho-emotional, legal, economic, and environmental dimensions required by their transitions: "the atmosphere changes by 100%, so we've had some difficulties to adapt". Together with the lack of vicinity or connectivity to employment and of access to solidarity ties and neighborhood heritages, this yielded a limbic arena where residents feel lost about the logics guiding their lives and livelihoods.

The socio-political limbo is further intricated by CiV's *insufficient police forces* ("Police presence, it is a weakness here"); *unemployment rates* ("Almost always, the main reason for criminality is unemployment"); and *excessive street vendors* ("They've damaged our public space, particularly the cycle-routes"). This has partially led to significant *criminality rates, drug use and micro-trafficking;* which poses significant perils as safety is essential for sustainable neighborhoods (Shaftoe, 2000). Against this, residents install informal security systems (*e.g.*, alarms). Others want to organize protection squads: "it's urgent that we organize security fronts, install alarms, arm ourselves, even with clubs". Moreover, occasional police operations oust informal vendors, who are sporadically related to crime: "many vendors sell their products, others are involved in drug micro-trafficking".

Public spaces are not accessed at certain times due to *internal social issues* (crime, drug use, child and women abuse, noise, prostitution: "from around 9-10 pm to 4 am, these people offer all kinds of pornography"). Residents' agency against this is limited. Yet, they have started initiatives such as sports and music training "aimed at the occupational and ethical recovery of youth" —who are usually associated with the above issues. Also, through Facebook, they alert each other about crimes, and post about support lines for abuse victims. What is more, social ills might also be related to CiV's *scant cultural and entertainment venues.* Residents propose "to create spaces to recognize the local cultural patrimony," which intimately relates to nearby ecosystems.

A further cause for the sociopolitical limbo is the *compulsory membership to the Amarilo-led maintenance/participation association: Agrupación Ciudad Verde*. This costs each household COP$ 5,000/month and was not made explicit at the time of purchase. Many manifest that it partially releases Soacha from its duty and violates their right of free association (Pulido-Moreno, 2014). From the onset, "the community was divided into two sides, which I'd say are irreconcilable by now".

Adding to the limbo, the significant share of CiV's *IDPs* was fully located in the Acanto compounds (Figure 11), partly conducing to their *socio-spatial stigmatization:* "A small percentage stigmatized Acanto, but within Acanto there are good people… there are professionals". With this, CiV's urban design precludes a healthy social mix, which in turn provokes long appropriation and adaptation processes (Méndez *et al.*, 2014).

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Figure 10: Socio-spatial stigmatization

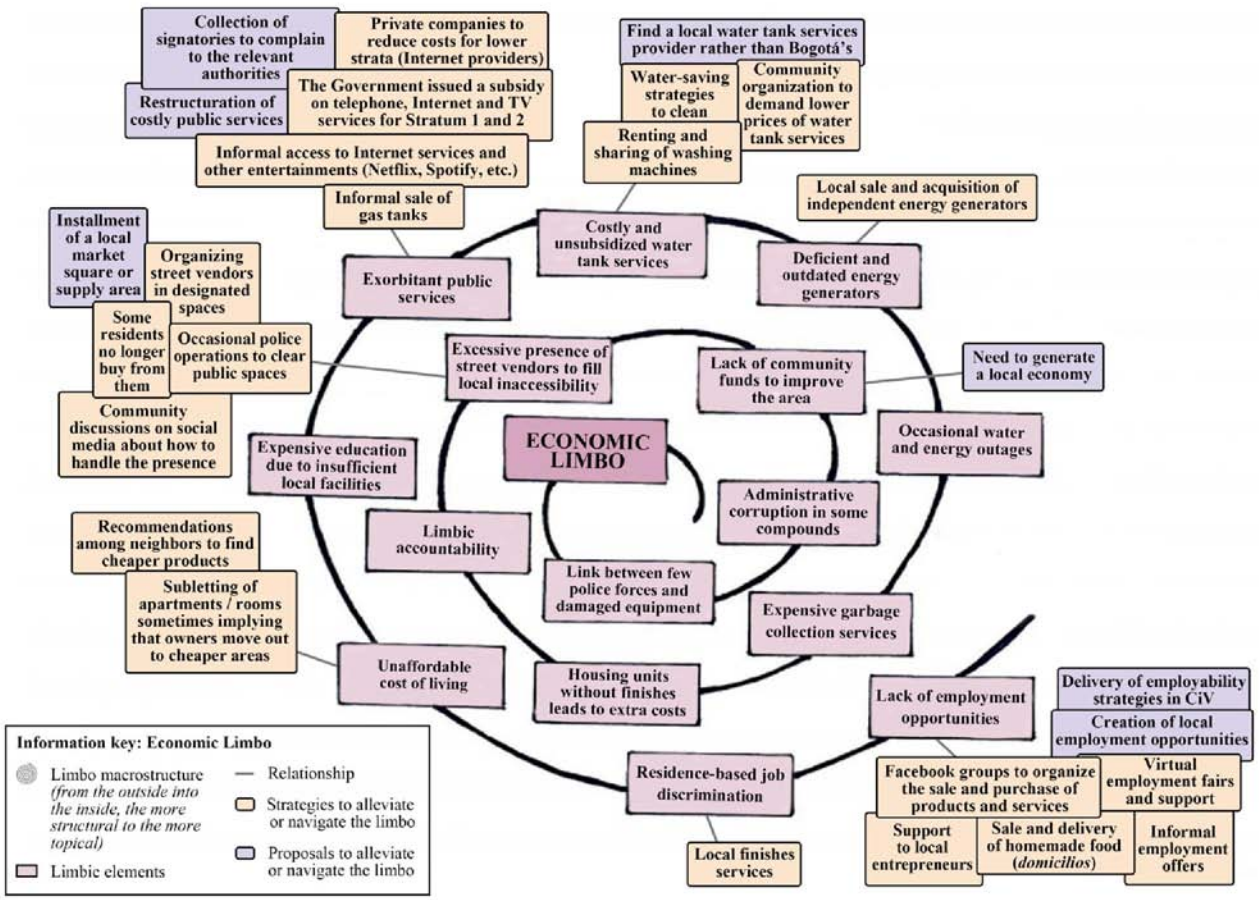


Source: Google Maps.

All the above culminates in *insufficient community participation and social discouragement.* Participation levels fluctuate, with no overall commitment to improving and maintaining the area: "Each family closes itself within four walls and the rest of the people here are of no interest whatsoever". Also, some see the division over the *Agrupación* as a hoax that hampered CiV's improvement. What is more, the *missing social cohesion has stagnated the resourcefulness and solidarity* that emerge within organized communities. To alleviate this, a small minority has started to organize, forging an incipient community spirit.

c) *Economic Limbo*

Figure 11: Economic Accessibility Limbo



Own elaboration.

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Together with CiV's detachment and disconnection, the roots of its economic limbo (Figure 12) are the *lack of local employment* and the *residence-based job discrimination* usually faced in the capital: "'You live in Soacha, that's a problem'. They'll think: 'he'll be late all the time'". To alleviate this, via Facebook, residents sell and access products, services and homemade foods, informal job offers, and employment-seekers fairs. A resident narrates: "I knew how to make sanitary products. I said let's sell them through those groups. […] now I work on that". Citoverdinos also demand that "employability strategies be implemented," and for the Municipality to "to generate jobs".

The above entrepreneurialism responds to *unaffordable living costs,* which are complemented by *expensive education* (Section 6.1), *exorbitant public services, costly unsubsidized aqueduct services, deficient and outdated energy generators,* occasional *water and energy outages, expensive garbage collection* and *housing units coming without finishes,* which makes residents spend extra: "All of us came here thinking that our finances would improve, but instead: our home ownership dream has become a nightmare".

Over 50% of Citoverdinos have a monthly income lower than COP$500,000, which is below the current minimum salary (COP$877,803). Approximately 30% disclosed incomes between COP$500,000-1 million; 15% between COP$1-2 million; and only 5% over COP$2 million (Moreno & Rubiano, 2014). Combined with the unaffordable living costs, this reflects that Citoverdinos are imposed a life beyond their means, with many deciding to leave because of that.

However, residents use some strategies to improve the situation. Many rent rooms or their own apartments—moving out to affordable areas. Also, they exchange recommendations on cheaper products and services through Facebook. Regarding the insufficient education coverage, they provide informal services, support lessons, or have their children live in Bogotá (Section 6.2). As to the expensive public services, via Facebook they acquire informal gas tanks, Internet, and other entertainments (*e.g.,* Netflix, Spotify). Recently, the government issued a subsidy on telephone, Internet, and TV for strata 1 and 2; so those on VIP housing were able to benefit from cost reductions. However, since most housing in CiV are stratum 3, residents are organizing to request a restructuration of public services costs to the relevant authorities. Aligned with this, "[stratum 3] subsidies are for Bogotá residents […], and all we do in Soacha is buy water from Bogotá at full fares". Residents express that construction companies had ensured that housing was going to be stratum 1-2––through which they could have accessed subsidies and afford living costs.

Nevertheless, to pay less for water, they rent washing machines and apply water-saving cleaning strategies, "lowering the bill by COP$20,000". Furthermore, to reduce costs, they propose for water services to come from Soacha instead of Bogotá. The outdated energy generators and the occasional outages lead residents to buy and sell informal generators: "you don't have to suffer anymore when there's no light". Section 6.4 elaborates further on how they are navigating the fact that "Soacha at large has […] the most expensive garbage collection services". Last, some residents who know masonry have started to offer informal finishes. Such an expensive service-provision scenario is further embroiled by the *limbic accountability* (Section 6.1).

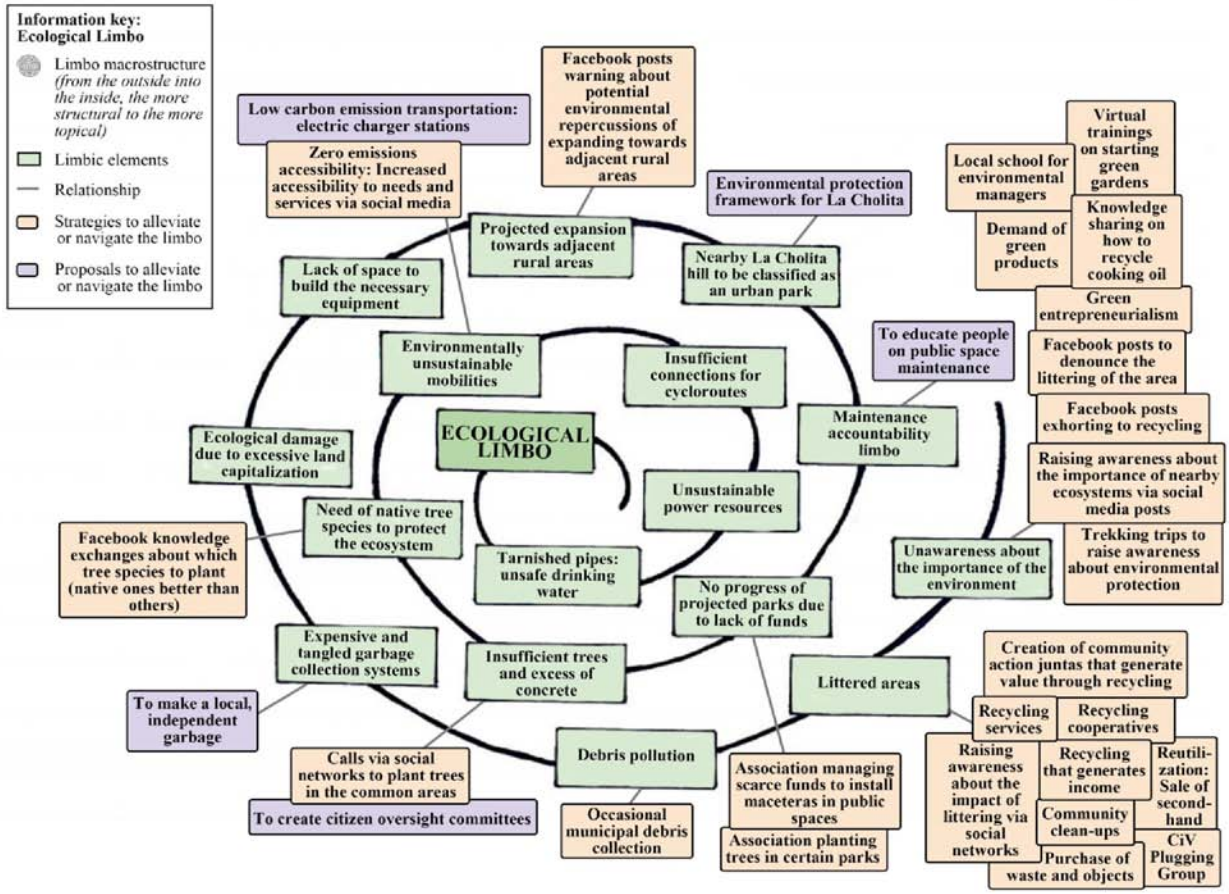
The economic limbo reflects a significant degree of *inaccessibility that street vendors have tried to fill in.* Nonetheless, due to residents buying from them, their presence has "exceeded the formal activity—that's shopping centers" and "pedestrian transit is more and more complicated" (Section 6.1). To address this, some residents have stopped buying from them, others are having Facebook discussions about how to handle the situation, and specific sale points have been designated. Moreover, occasional police operations clear public spaces; but this is not effective nor lasting, for vendors come back. Residents propose "the creation of a commercial passageway". Yet, this could imply some formalization that many might not be willing or able to comply with.

In line with this, *the community lacks funds to improve and maintain common areas:* "we don't have savings nor anyone to give us money". For this, some residents expressed the need for a local economy: "We all have needs and if I had a way to provide for them and not go to Bogotá to get them…". Yet, CiV still lacks community cohesion for this (Section 6.2). Additionally, some claim a *corrupted administration of certain compounds,* which further threatens the scant funds available. However, not only there is scarcity for maintenance and improvement, but some equipment is being *damaged,* which partly links to the *lack of sufficient police presence* (Section 6.2).

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d) Ecological Limbo

Figure 12: Ecological Accessibility Limbo



Own elaboration.

CiV's ecological limbo (Figure 13) originates from a *deep unawareness about the importance of protecting the environment:* "Sadly, there are zones in CiV that have become landfills". This unawareness has resulted in *extensive littering* and *debris pollution* across CiV's common and surrounding areas—a situation further exacerbated by the *expensive and intricate garbage collection system.*

Residents counter this through Facebook posts fostering recycling, the protection of nearby ecosystems and sharing eco-friendly knowledge: "Recycling used oil […] A liter of oil can pollute up to 1000 water liters". Others use Facebook to denounce CiV's frequent littering: "now there are very little trees, no birds, there was a ravine, but it dried up". Complementarily, some residents offer informal recycling services, while others have recycling collectives to generate community income. Moreover, some Citoverdinos are doing green entrepreneurism (*e.g.*, selling biodegradable and reusable products) or demanding ecological items (*e.g.*, diapers).

In parallel, the *Agrupación* organizes a school of environmental management and protection, while the Facebook groups display virtual permaculture trainings. Also through Facebook, others organize trekking trips "to clean up the mountain […]. We'll hike the mountain to learn more about the ecosystem and the importance of the wetland, so kids are welcome". Additionally, the *Ciudad Verde Plugging Group* collects littered garbage while exercising. Moreover, Facebook allows to purchase waste, objects, and second-hand clothing.

Moving on, apart from causing *ecological damage, the Macro-project's excessive land capitalization has led to insufficient spaces for the necessary equipment* (*Fig.6*). CiV incorporated rural land into Soacha's urban fabric and was located within an area of rich hydric resources and fragile ecosystems. It was built near three rivers, the Tibanica ravine, and the Tibanica-Potrero Grande wetland—now polluted and contaminated (Méndez *et al.*, 2014).

As if this was not enough, *CiV is projected to grow towards neighboring rural areas,* but residents "won't have the need to expand towards *vereda* de Canoas because that could generate ecological and social damages". Several Facebook posts warn about the potential repercussions of expansion, though without generating much reaction. Along these lines, a *bordering rural zone was designated as an urban*

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"ecological" park, yet residents "believe that the archeological and ecological richness of the area should constitute it as an *ecological* park instead".

Furthermore, the *maintenance accountability limbo* (Section 6.1) has an environmental print: "CiV's pondage is polluted. Neither the aqueduct company or the *Agrupación* take care of it. We're suffering the severity of mosquitoes, rodents, and fetid smells". For this, Citoverdinos propose to educate people on upkeeping, raising the collective responsibility over CiV. Within this context, the lack of funds is *stalling the progress of some projected parks:* "We've been here for 7 years and Logroño park has failed to make sufficient progress". Also, there is *excessive concrete and few trees:* "CiV is a city but without the green because what they're rather doing is paving". Against this, the *Agrupación* is incorporating flowerpots and planting trees in some areas. Additionally, via Facebook, several people beseech others to plant seeds. In this sense, the *need of native species to protect local ecosystems*—given invasive species damaging the soil—is partially addressed through Facebook knowledge exchanges, since "it's not planting seeds and that's it".

For its part, CiV's detached location and lack of jobs prevents bikes from becoming predominant. This is further hindered by *non-interconnected cycle-routes* (*Figure* 7). Residents want "to connect Bogotá's cycle-routes to Soacha's, because we don't have adequate and productive connectivity". However, this might only benefit those who can find a local job or afford a bike. Meanwhile, criminality levels and insecurity perception deter walking at certain hours (Section 6.2). With this, most residents use motorized transportation, constituting *environmentally-unsustainable mobilities* (Section 6.1)—which is specially concerning given Soacha's alarmingly bad air quality (El Espectador, 2020). Residents state: "transportation should be improved and linked to the environmental part: the implementation of bike use". They partially alleviate the unsustainable mobilities through Facebook. A zero-emissions accessibility system, it connects them to needs and services: "I use it for communication and to look for whatever I need". Nonetheless, sometimes Facebook merely provides information, leading to motorized trips.

In this line of unsustainability, residents attest that *energy resources are not sustainable* either. Some compounds still depend on the construction companies' sodium-based lighting, and most of them do not have emergency plants nor replacement electric fluid. This yields occasional power outages and damaged household appliances (Section 6.3). What is more, some Facebook posts denounce that their *buildings' pipes are heavily tarnished,* making it unsafe to drink water from there. This drives people to buy bottled water and incur on additional costs and plastic consumption.

VII. Discussion: Unlocking Limbo? A Local Ecological Economy

As Vecchio *et al.* (2020) stated accessibility-based progress concentrates in a few areas of LatAm. In the BMR, the centralization of accessibility not only disregards but adversely spills-over dependent peripheries like Soacha and limbic social housing like CiV. When lacking accessibility, non-limbic locations at least offer: proximity, connectivity or networks—people leveraging the formality-informality continuum to their advantage. Yet, *Section 6* confirms that CiV's accessibility practices along the continuum are constrained by inadequate territorial and mobility design, sociopolitical neglect, economic limitations and insufficient ecological integration.

Observed through its graphic representation, the territorial-mobility limbo displays the most limbic elements, reflecting CiV's structural hindrances in services, design, and disconnection (*Figure* 7). For their part, the few strategies identified to soothe the socio-political limbo underscore the need for meso, city and macro-scale institutional reforms—evoking Dávila's (2014) call to address the roots of inequity and segregation when tackling deficient accessibility.

Conversely, the economic and ecological limbos present the most strategies. The correlation between accessibility and sustainability (James *et al.,* 2013; Pelletier, 2010; Boyce, 2008; Anand & Sen, 2000) makes clear that a sustainable CiV would need to improve its accessibility. Residents' entrepreneurialism and green initiatives educe that the unlocking of all four limbos could progressively be achieved through a local ecological economy that emulates the principles of a social enterprise (Vargas-Sáenz, 2016). As a resident hints: "First, we need to take charge and understand the importance of recycling from the source; but also, regarding employment, there are many opportunities with all these compounds and the amount of waste we generate".

Working along accessibility logics, a more financially-autonomous and ecological CiV would positively affect its multi-dimensional sustainability. In parallel, such a model could enable the transition that social housing purportedly facilitates (Escallón, 2011); tying social mobility to the existing entrepreneurialism. What is more, it would fill the maintenance vacuum, favoring the improvement of equipment and bringing more transparency. As it grows, an ecological economy would organize and increase the community's political weight; allowing residents more maneuvering over out-of-agency limbic elements.

That stated, Section 6 illustrates the role of informality in rendering access to essential services that CiV's design and structures do not (*e.g.,* health, affordable products, jobs, and income). However, do

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these informalities engender a more sustainable CiV? It depends. For instance, most of its informal mobilities are neither affordable, ecologically sustainable nor safe. Nevertheless, learning from informality, policies must be based on evidence rather than perception (Section 2.1), so that they can target risk and vitiated dynamics yet benefit from informality's guile. Lévy's continuum (2020) teaches that informality and formality cannot be approached in silos, but holistically, which—as the limbo framework has aspired to show—offers a more rigorous approach to both accessibility and sustainability.

Drawing from the feminist literature (Brun & Fábos, 2011), informal processes can also teach new and creative ways towards sustainability, accounting for economic and resource efficiency (Dreifuss-Serrano, 2015). This outlook allows to "build on [informality's] inclusiveness while addressing its shortcomings" (Vorley, 2017). Therewith, CiV's informality reflects a taste for local and creative solutions, with solidarity and support networks incipiently being built through Facebook and arenas beyond this analysis. Since informality's nature most likely precluded some strategies from being reflected in my research sources.

Along these lines, informality in CiV is also a resilience hub in the face of climate change (Chen, 2017). In generating income, informal recycling services or collectives might be able to tackle many limbic elements at once—contributing to long-term behavioral changes like community clean-ups and plugging. Moreover, the trading of waste and second-hand items via Facebook indicates an incipient digital ecological culture—though motivated by financial reasons. On another note, exorbitant services costs have engendered strategies that can benefit the environment (*e.g.*, water-saving cleaning strategies). Should these costs be restructured, mechanisms to keep such ecological initiatives alive ought to be conceived.

Echoing Wee *et al.* (2012), this work has also aimed to contribute to the filling-in of accessibility's digital gap. Digital access unevenly distributed (Malecki & Moriset, 2008), only 39.15% of Soachan households have Internet connection (GC, 2017b). This figure unavailable for CiV, assumptions can be made that many lack access to Internet and Facebook—constituting a somewhat exclusionary system. Nonetheless, when accessible, these tools are indeed instrumental to alleviate multidimensional inaccessibility. Their careful and humanized use in contexts like CiV can begin to unlock: economic limbos through decreased costs (Cieślik & Kaniewska, 2004); sociopolitical limbos via increased political engagement (Mallén, 2013); and territorial-mobility and ecological limbos through lower- or zero-emission accessibility (van Wee *et al.,* 2012).

The benefits of Facebook and an ecological economy notwithstanding, community organization and cohesion are still low. As residents express, sustainability requires community participation (*Annex 5*). The stronger the community, the better equipped to protect its needs, interests, and neighboring ecosystems. With this, CiV's lacking community cohesion also exposes the repercussions (*i.e.,* social division) of 'participation fixes' like Agrupación Ciudad Verde. However, backed by social cohesion's strength and resourcefulness, an autonomous ecological economy would gain political leverage to affect ingrained limbic elements. In any event, this model should be complemented by institutional and structural support to attain long-lasting sustainability and accessibility in CiV.

What is more, CiV's unidimensional spatial use undermined what would have been an excellent sustainability feature: proximity (Cutini *et al.*, 2020). CiV's local accessibility to banks and supermarkets, should be extended to health, education, employment, and safe leisure spaces. Through strategic design, CiV should leverage the insufficient space and diversify the local satisfaction of needs; supporting inhabitance's multi-dimensionality (Escallón, 2011). In parallel, dependence on Bogotá should be decreased by further relying on Soacha and Bosa to access what CiV's limbo precludes. This could reduce emissions, the ecological damage of expansion to provide equipment, and promote non-motorized transportation—though local safety improvements would be needed. However, security levels can increase with social cohesion, through 'eyes-on-the-street' mechanisms (Jacobs, 1961). Moreover, cultural events and spaces are crucial to foster the much-needed internal social-mix, increase self-steem and avoid social stigmatization; but also, to attract Soachans into CiV and boost their mutual integration.

If CiV is to unlock its accessibility limbo—be it through an ecological economy or not—, the outcome should be scaled-up to Soacha. The advantages of unlocking CiV's limbo could and should tackle Soacha's structural issues—creating a constructive synergy between the MISN and its home municipality. This would ensure that sustainability dimensions, accessibility scales and leveraged (in)formality practices coalesce in tackling structural issues, without developing limbos instead. Sustainability approached as a social process, socioeconomic and ecological tensions dissolve (James *et al.,* 2013). In this manner, this outlook on sustainable logics could enable CiV to leverage these tensions as an opportunity and differentiating factor for the future.

VIII. Conclusions

This dissertation endeavored to extract lessons from Citoverdinos' accessibility practices on how to contribute a more synergic approach to accessibility, sustainability and (in)formality in CiV. The diversity of

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evidence reviewed (Section 5) unveiled territorial-mobility, socio-political, economic and ecological limbic elements. Accessibility's multiscalarity (Oviedo *et al*., 2020), sustainability's multidimensionality (James *et al*., 2013), and the formality-informality continuum (Lévy, 2002) have been essential lens to grasp CiV's limbos. Therewith, the intersection among these three concepts, the setting of CiV within the BMR's urban trajectories (Lévy *et al.*, 2017) and my accessibility limbo framework contribute to the literature to date and could be applicable to analyze other contexts and cities.

CiV's accessibility limbo is the translation of the territorial discrimination, socio-economic dissociation and discursive segregation underlying the BMR. Yet, the limbo framework revealed invaluable lessons through residents' formal-informal accessibility strategies (Section 6). Section 7 wraps these up by offering a way out of limbo: an autonomous ecological economy to potentially harness the intersection among accessibility, sustainability and (in)formality in CiV. Along this line, accessibility planning should start building upon those informal strategies that are valuable, for the *continuum in its full form* contains indispensable clues for sustainable urban accessibilities. The full continuum enables to listen to people, places and their needs attentively and attuned with the complexities thereof.

For its part, this work faced significant limitations. First, the inability to *talk with* Citoverdinos and read through oral nuances. I had visited CiV three times during July-August 2019, but not with a research purpose nor this project's idea in mind. Second, relevant data upon which this work is based was not fit for accessibility purposes. Third, information extracted from Facebook, focal group interviews and Maptionnaire was self-referenced, which might involve accuracy limitations. Fourth, the incapacity to analyze many informal practices from afar, for their nature is very elusive and usually unrecorded. Fifth, the MISN being still underway might (hopefully) outdate this dissertation's outcomes in due time.

Methodologically, this work's main innovation is its use of Facebook as a research method and information source for urban accessibility purposes. There is wider scope for leveraging this platform in accessibility analyses, especially in contexts that, as CiV, are detached and disconnected. Moreover, accessible from afar, Facebook offers considerable opportunities for researchers during COVID-19 times. In parallel, such zero-emission technologies can be fostered to reduce transportation-associated emissions in areas that cannot afford potentially-expensive retrofittings for local accessibility. This dissertation also aimed to contribute to filling in the qualitative gap of accessibility (Lucas & Uteng, 2018)—as did Oviedo & Titheridge (2016) and Vecchio (2020). Such qualitative approach allowed a more integral view of accessibility, bringing forward its social and intangible implications.

This dissertation has also identified gaps of knowledge that would benefit from further research. For instance, work that purposely targets CiV's multiscalar accessibility through focal groups and examines the impact of Facebook or similar digital technologies on people's daily accessibilities would be beneficial. Should this path be undertaken, it would be relevant to examine how intersectionally accessible the digital realm is to Citoverdinos or to residents of similar contexts. Particularly, in-depth exploration about how to generate social cohesion within detached, disconnected areas with accessibility-non-conducive design could contribute to the eventual constitution of autonomous ecological economies or other, self-defined grassroots initiatives.

At a practical level, planning and design need to ensure that accessibility progress in one area (*e.g.,* Bogotá) does not erode or feed off the deficits of peripheral others (*e.g.,* Soacha or CiV). Therewith, multiscalar accessibility, multidimensional sustainability and the full formality-informality continuum are a solid base to address socio-spatial-economic imbalances. Latin America's momentum in establishing itself as a blueprint for accessibility-based projects should not be let turn into a Catch-22 scenario in which metropolises and their inhabitants thrive at the cost and burden of their peripheral areas—which essentially contribute to their development. Rather, accessibility should be a restorative tool, and we should make justice to it by contributing planning, design and research that acknowledge its full complexity. In turn, if done integrally, accessibility will most certainly yield inclusive, sustainable, and happier urbanities that coalesce with natural ecosystems.

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Bibliography

1. Acosta Restrepo, P., Henao Padilla, M. J. (2011). Ciudad Verde: Los Macroproyectos en Acción. *Alarife, No.22*, pp. 26-45.
2. Amarilo, S.A. (2015). Ciudad Verde: Aprendiendo de la experiencia. Retrieved from: https://docplayer.es/13509181-Ciudad-verde-aprendiendo-de-la-experiencia-ivan-camilo-caicedo-gerente-desarrollo-de-negocios-amarilo.html
3. Amin S. (1973). *Le développement inégal. Essai sur les formations sociales du capitalisme périphérique*. Paris: Editions de Minuit.

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4. Anand, S., Sen, A. (2000). Human Development and Economic Sustainability. *World Development, 28*(12). 2029–49.
5. Alcaldía de Bogotá, Secretaría Distrital de Planeación, Cámara de Comercio de Bogotá, Secretaría de las Naciones Unidas, Centro para el Desarrollo Regional de las Naciones Unidas (UNCRD) (2014). Comité de Integración Territorial de Bogotá y los municipios circunvecinos. Documento Técnico de Soporte. Bogotá: Alcaldía Mayor de Bogotá D.C. Retrieved from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwiMrO_zsrjqAhVRKBoKHS7YBGgQFjABegQIBRAB&url=http%3A%2F%2Fwww.sdp.gov.co%2Fsites%2Fdefault%2Ffiles%2Fdocumento_tecnico_de_soporte_para_la_constitucion_del_comite_de_integracion_territorial_de_bogota_y_los_municipios_circunvecinos.pdf&usg=AOvVaw2J1NUP-BBRbPYoTI1wibyi
6. Alcaldía de Soacha (2008). Plan de Desarrollo de Soacha 2008-2011. Retrieved from: https://www.alcaldiasoacha.gov.co/seleccione-la-opcion-deseada/plan-de-desarrollo-municipal/file/856-plan-de-desarrollo-municipal-2008-2011
7. Anif, Asociación Nacional de Instituciones Financieras (2017). Reducción del efectivo y tamaño de la economía subterránea en Colombia. Documento realizado por Anif para la Asociación Bancaria de Colombia. Bogotá: Asociación Nacional de Instituciones Financieras. Retrieved from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwik2MHgrffpAhUECRoKHY7BA4UQFjAAegQIAxAB&url=https%3A%2F%2Fwww.anif.com.co%2Fsites%2Fdefault%2Ffiles%2Finvestigaciones%2Fanif-asobancaria-efectivo0517.pdf&usg=AOvVaw34HTjWgNqfeN0_DVTabxMd
8. Arango Escobar G. (2001) La Vivienda en Colombia en el cambio de siglo, Herencia y retos. In: Brand P. C., (Ed.) *Trayectorias urbanas en la modernización del Estado en Colombia*. Medellín: Universidad Nacional de Colombia.
9. Badillo M., M. (2017). Propuesta de comunicación y educación ambiental a través del Facebook y el uso de narrativas digitales. *Entramado, 8*(1), 128-139. Revista de la Universidad Libre de Colombia. Retrieved from: https://revistas.unilibre.edu.co/index.php/entramado/article/view/3419
10. Blaikie, N. (2003). Inferential Analysis: From Sample to Population. In *Analyzing Quantitative Data*. London: SAGE Publications.
11. Bramley, G., Dempsey, N., Power, S., Brown, C. (2006). "What is 'social sustainability', and how do our existing urban forms perform in nurturing it?" Paper for presentation in the 'Sustainable Communities and Green Futures' track. Bartlett School of Planning, University College London.
12. Bayat, A. (1997). *Street Politics: Poor People's Movements in Iran*. New York: Columbia University Press.
13. Bocarejo, J. P., & Oviedo, D. (2012). Transport accessibility and social inequities: A tool for identification of mobility needs and evaluation of transport investments. Journal of Transport Geography, 24, 142–154.
14. Boisjoly, G., Serra, B., Oliveira, G., & El-Geneidy, A. (2020). Inequality in transit: Evaluating public transport distribution through accessibility measurements in Sao Paulo, Rio de Janeiro, Curitiba and Recife, Brazil. *Journal of Transport Geography, 82*, 1-11.
15. Boyce, J. (2008). Is Inequality Bad for the Environment? *Research in Social Problems and Public Policy, 15*. 267–88.
16. Brand, P. and Davila, J. (2011) Mobility Innovation at the Urban Margins, Medellin`s Metrocables. *City, Vol. 15*(6), pp 647-661.
17. Brun, C., Fábos, A. (2011). Making Homes in Limbo? A Conceptual Framework. *Refuge, vol. 31*, no. 1, pp. 5–17.
18. Buendía, V., Gagan, O. (2012). *Infrastructure Journal Infrastructure Investment Guide: Colombia*. London: Infrastructure Journal, British Foreign Commonwealth Office (FCO), UK Trade & Investment, Agencia Nacional de Infraestructura (ANI).
19. Burton, E (2003). Housing for an urban renaissance: implications for social equity. *Housing Studies, 18*, 4, 537-562.
20. Burton, E. (2000). The potential of the compact city for promoting social equity. In Williams, K., Burton, E., Jenks, M (Eds.) *Achieving sustainable urban form*. Routledge: London.
21. Cátedra Gerardo Molina (2009). *Derechos económicos, sociales y culturales*. Bogotá: Universidad Libre de Colombia.
22. Chase-Dunn, Ch. K. & Grimes, P. (1995). World-Systems Analysis. *Annual Review of Sociology, 21*: 387–417.
23. Chen, M. A. (2017). The Informal Economy in African Cities: Key to Inclusive and Sustainable Urban Development. *OECD Development Matters*. [CrossRef]
24. Cieślik, A., & Kaniewska, M. (2004). Telecommunications infrastructure and regional economic development: The case of Poland. *Regional Studies, 38*, 713–725.
25. Ciuffoli, C. & López, G. (2010). Facebook como paradigma de la alfabetización digital en tiempos de barbarie cultural. En Piscitelli, A., Adaime, I., Binder, I. (Eds.) *El proyecto Facebook y la posuniversidad: sistemas operativos sociales y entornos abiertos de aprendizaje*. Barcelona, España: Ariel.

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26. Cohen-Blankshtain, G., & Nijkamp, P. (2004). The appreciative system of urban ICT policies: An analysis of perceptions of urban policy makers. *Growth and Change, 35*, 166–197.
27. Conlon, D. (2011). Waiting: Feminist Perspectives on the Spacings/Timings of Migrant (Im) Mobility. *Gender, Place and Culture 18*, no. 3 (2011): 353–60.
28. Cortés Ferrández, P. (2019). Resilience spaces: rethinking protection. *Forced Migration Review, 62*(October, 2019). Retrieved from: https://www.fmreview.org/return/cortesferrandez
29. Couclelis, H., & Getis, A. (2000). Conceptualizing and measuring accessibility within physical and virtual spaces. In Janelle, D., Hodge, D. (Eds.). *Information, place and cyberspace* (pp. 15–20). Berlin: Springer.
30. Cresswell, T. (1996). *In Place/Out of Place: Geography, Ideology and Transgression*. Minneapolis: University of Minneapolis Press.
31. Cutini, V., Di Pinto, V., Rinaldi, A. M., Rossini, F. (2020). Proximal Cities: Does Walkability Drive Informal Settlements? *Sustainability, 12*, 756. doi: 10.3390/su12030756
32. DANE (2005). Censo General 2005. Departamento Administrativo Nacional de Estadística Retrieved from: https://www.dane.gov.co/index.php/estadisticas-por-tema/demografia-y-poblacion/censo-general-2005-1
33. Dávila *et al*. (2006). *Suelo urbano y vivienda para la población de ingresos bajos. Estudios de caso: Bogotá-Soacha-Mosquera; Medellín y Área Metropolitana*. Cities Alliance and The Development Planning Unit, University College London: London. P.1-274.
34. Dávila, J. (Ed.) (2012). *Urban Mobility and Poverty: Lessons from Medellín and Soacha, Colombia*. London and Medellín: Development Planning Unit, UCL and Universidad Nacional de Colombia.
35. Deneulin, S., & Sánchez-Ancochea, D. (2018). Urban inequality, youth and social policy in Latin America: Introduction to special section. *Oxford Development Studies, 46*(1), 3–9.
36. Dijst, M. (2004). ICTs and accessibility. An action space perspective on the impact of new information and communication technologies. In M. Beuthe, V. Himanen, A. Reggiani, & L. Zamparini (Eds.). *Transport developments and innovations in an evolving world* (pp. 27–46). Berlin: Springer.
37. Diminescu, D. (2012). E-Disporas Atlas. Exploration and Cartography of Disaporas in Digital Networks (online). Retrieved from: http://www.inter-disciplinary.net/at-the-inter-face/wp-content/uploads/2012/06/diminescudpaper.pd
38. Ministerio de Vivienda (2008). Resolución 2363 de 2008, Documento técnico de Soporte, por el cual se adopta el Macroproyecto de Interés Social Nacional Nuevo Occidente "viviendas con corazón hacia territorios equitativos". Archivo Veeduría Pasión por Nuevo Occidente. Resolución 0340 de 2012, por la cual se aclara y modifica la resolución 2363 de 2008. Retrieved from: http://www.minvivienda.gov.co/ResolucionesVivienda/0340 - 2012.pdf
39. El Espectador (2020, marzo). La CAR declaró nivel de prevención por calidad del aire en Soacha y Mosquera. *El Espectador*, Redacción de Bogotá. Retrieved from: https://www.elespectador.com/noticias/bogota/la-car-declaro-nivel-de-prevencion-por-calidad-del-aire-en-soacha-y-mosquera-articulo-908050/
40. El Espectador (2019). Listos prepliegos para construir la troncal de Transmilenio en la Av. Ciudad de Cali. *El Espectador*, Redacción de Bogotá. Retrieved from: https://www.elespectador.com/noticias/bogota/listos-prepliegos-para-construir-la-troncal-de-transmilenio-en-la-av-ciudad-de-cali-articulo-894608
41. El Espectador (2019). Alcaldía de Soacha pide al DANE claridad con cifras del censo. *El Espectador*, Redacción de Bogotá. Retrieved from: https://www.elespectador.com/noticias/bogota/alcaldia-de-soacha-pide-al-dane-claridad-con-cifras-del-censo/
42. El Espectador (2020). Congreso proclamó reforma constitucional que oficializa la Bogotá Región. *El Espectador*, Redacción de Bogotá. Retrieved from: https://www.elespectador.com/noticias/bogota/bogota-tendra-area-metropolitana-congreso-proclamo-reforma-constitucional-que-la-decreto/
43. El Tiempo (2020). ¿Por qué el alcalde de Soacha no quiere más viviendas VIS? *El Tiempo*. Retrieved from https://www.eltiempo.com/bogota/por-que-el-alcalde-de-soacha-no-quiere-mas-viviendas-vis-449332
44. El Tiempo (2019). Transmilenio desde Soacha hasta Portal del Norte. *El Tiempo*. Retrieved from https://www.uniminutoradio.com.co/transmilenio-desde-soacha-hasta-portal-del-norte/
45. Escallón G., C. (2011). La vivienda de interés social en Colombia: Principios y retos. *Revista de Ingeniería, 35,* pp. 55-60. Retrieved from: https://www.redalyc.org/articulo.oa?id=1210/12102276 3010
46. Ernste, H., Martens, K. and Schapendonk, J. (2012). The Design, Experience and Justice of Mobility. *Tijdschrift voor Economische en Sociale Geografie, Vol.103*(5), pp. 509-515.
47. Escobar-García, D. A., García-Orozco, F. J., Correa-Calle, O. (2013). Evolution of accessibility Manizales (2000 - 2009) and its relationship with the transport infrastructure construction. AVANCES Investigación en Ingeniería Vol. 10 - No. 1, pp.35-41.
48. Espinosa-González, C. I. (2014) *Los Macroproyectos de Interés Social Nacional como operaciones urbanas integrales para la política pública de vivienda. Caso Ciudad Verde, Área*

© 2022 Global Journals

Metropolitana de Bogotá. MSc Thesis on Urban and Regional Planning.Bogotá: Pontificia Universidad Javeriana, Facultad de Arquitectura y Diseño.
49. Fernández-Redondo, L. (2016). Shaping Urban Accessibility: Technology's Place in a Sustainable Future. DG Cities Ltd. and GATEway. Retrieved from: https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=&ved=2ahUKEwifprT4g8jrAhVqD2MBHcudCHsQFjABegQIARAB&url=https%3A%2F%2Fwww.dgcities.com%2Fs%2FGATEway-White-Paper.pdf&usg=AOvVaw35Xn_MECdvWU7BVyeSmlTB
50. Figueroa Martínez, C., Hodgson, F., Mullen, C., Timms, P. (2018). Creating inequality in accessibility: The relationships between public transport and social housing policy in deprived areas of Santiago de Chile. *Journal of Transport Geography, 67*, pp. 102–109.
51. Flint, J., Raco, M. (Eds.) (2012). *The Future of Sustainable Cities: Critical Reflections*. Bristol: Policy Press.
52. Gandy, M. (2005) Learning from Lagos. *New Left Review, 33*, pp. 37-53.
53. García Correa, C. B. (2019). La segregación territorial y la revisión general de la estratificación socio-económica en Medellín. (Tesis de maestría - Derecho Urbanístico). Universidad de Antioquia, Medellín.
54. García-Pulido, J. J. (2015). *Una aproximación a la movilidad urbana desde la perspectiva de lo social: un estudio de caso de Ciudad Verde, Soacha*. B.A. Thesis on Sociology. Bogotá: Pontificia Universidad Javeriana.
55. Gee, J. P. (2010). *Introduction to Discourse Analysis*. London: Taylor & Francis Group.
56. Geurs, K., & van Wee, B. (2004). Accessibility evaluation of land-use and transport strategies: Review and research directions. J*ournal of Transport Geography, 12*(2), pp. 127–140. doi: 10.1016/j.Jtrangeo.2003.10.005
57. Gil Solá, A., Vilhelmson, B., Larsson, A. (2018). Understanding sustainable accessibility in urban planning: Themes of T consensus, themes of tension. Journal of Transport Geography 70 (2018) 1–10.
58. PND - Plan Nacional de Desarrollo 2006-2010 (2007). *Ley 1151 de 2007*. Función Pública: El Gestor Normativo. Retrieved from: https://www.funcionpublica.gov.co/eva/gestornormativo/norma.php?i=25932
59. Gómez-Pérez, D. P. (February, 2020). Ciudad Verde quiere ser la comuna siete de Soacha. *Periodismo Público*. Retrieved from: https://periodismopublico.com/ciudad-verde-quiere-ser-la-comuna-siete-de-soacha
60. Grieco, M. (2015). Poverty mapping and sustainable transport: A neglected dimension. *Research in Transportation Economics, 51*, 3–9. doi: 10.1016/j.retrec.2015.07.00
61. Gutiérrez, J., Condeco-Melhorado, A., and Martín, J. (2012). Using Accessibility indicators and GIS to assess spatial spillovers of transport infrastructure investment. Journal of Trans- port Geography. 2012, 18, 141-152.
62. Guzman, L.A., Oviedo, D., Bocarejo, J.P.J.P. (2016). City profile: The Bogotá Metropolitan Area that never was. *Cities 2016*, 60 Pa A, 202–215.
63. Guzman, L.A.; Oviedo, D.; Rivera, C. (2017). Assessing equity in transport accessibility to work and study: The Bogotá region. *Journal of Transport Geography 58*, 236-246.
64. Gwyther, G. (2010). New Mobilities and the Formation and Maintenance of the Personal Communities of Social Housing Residents. Social Justice and Social Change Research Centre, University of Western Sydney, Penrith South, NSW, Australia.
65. Holland, T. G., Peterson, G. D., Gonzalez, A. (2009) A Cross-National Analysis of How Economic Inequality Predicts Biodiversity Loss. *Conservation Biology, 23*(5). 1304–13. DOI: 10.1111/j.1523-1739.2009.01207.x.
66. Holstein, J., & Gubrium, J. (2012). Practicing Dialogical Narrative Analysis. In Varieties of Narrative Analysis. Thousand Oaks: SAGE Publications.
67. Hyndman, J., Giles, W. (2011). Waiting for What? The Feminization of Asylum in Protracted Situations. *Gender, Place and Culture 18*, no. 3, pp. 361–79.
68. Jaramillo, C., Ríos, P. A., Ortiz, A. (2009). Incremento del parque automotor y su influencia en la congestión de las principales ciudades colombianas. Cali: Universidad del Valle.
69. Jones, P., Lucas, K., 2012. The social consequences of transport decision-making: clarifying concepts, synthesising knowledge and assessing implications. *J. Transp. Geogr. 21*, 4–16.
70. Jouffe, Y. (2011). Las clases socio-territoriales entre movilidad metropolitana y repliegue barrial. ¿Tienen los pobladores pobres una movilidad de clase? *Revista Transporte y Territorio, 4*, pp. 84–117.
71. Katzman, R. (2001). Seducidos y abandonados: el aislamiento social de los pobres urbanos. *Revista de la CEPAL, 75*: 171-189.
72. Keeling, D. J. (2008). Latin America's transportation conundrum. *Journal of Latin American Geography,* 7(2), 133-154.
73. Lévy. C. (2013). Travel choice reframed: "deep distribution" and gender in urban transport. *Environment & Urbanization, Vol. 25*(1), 47-63. Retrieved from: https://journals.sagepub.com/doi/full/10.1177/0956247813477810

© 2022 Global Journals

74. Lévy, C. (2020, January). Session 1: Transport, development and the reproduction of inequality in cities. DEVP0032 - Transport Equity and Urban Mobility. University College London, The Bartlett Development Planning Unit, London.
75. Lévy, C., Allen, A., Castán Broto, V., Westman, L. (2017). Unlocking urban trajectories: Planning for environmentally just transitions in Asia in Sustainable Cities in Asia. In Caprotti, F., & Yu, L. (Eds.) *Sustainable Cities in Asia*. Florence: Routledge.
76. Lévy, C., Dávila, J., (2017) Planning for Mobility and Socio-Environmental justice? The case of Medellín. In Allen, A. *et al*. (eds), *Environmental justice and resilience in the urban Global South: An emerging agenda*. London: Palgrave.
77. Londoño-Torres, G. E. (2016). *Reproducción de la informalidad en reasentamientos de población. Macroproyecto de interés social nacional Ciudadela Nuevo Occidente, Medellín*. MSc Thesis on Regional Urban Studies. Medellín: Universidad Nacional de Colombia.
78. Lucas, K (2013). Qualitative methods in transport research: the 'action research' approach. In Zmud, J, Lee-Gosselin, M., Carrasco, J.A., (Eds.). *Transport Survey Methods: Best practice for decision making*. Bingley: Emerald Publishing
79. Lucas, K., Uteng, T. P. (2018). *Urban mobilities in the global South*. London: Routledge.
80. Lucas, K., van Wee, B., & Maat, K. (2015). A method to evaluate equitable accessibility: Combining ethical theories and accessibility-based approaches. *Transportation*, 1–18. DOI: 10.1007/s 11116-015-9585-2.
81. Lucas, K., Verlinghieri, E., Mattioli, G., Guzman, A. (2016). Transport poverty and its adverse social consequences. *Institution of Civil Engineers Publishing, 169,* Issue TR6, pp. 353-365.
82. James, P. A., Magee, L., Scerri, Thom, J., Padgham, L., Hickmott, S., Deng, H., Cahill, H. (2013). Reframing social sustainability reporting: Towards an engaged approach. *Environment, Development and Sustainability, 15*(1), 225-243.
83. Janelle, D., & Hodge, D. (1998). *Information, place and cyberspace: Issues in accessibility*. Berlin: Springer.
84. Laudano, C. N., Corda, M. C., Planas, J. A., Kessler, M. I. (2016). Los usos de la red social Facebook por parte de bibliotecas universitarias argentinas: Reflexiones en torno a las dinámicas comunicativas en la Web 2.0. Revista Interamericana de Bibliotecnología, Vol. 39. Num. 1. pp. 23-37. Universidad de Antioquia, Medellín, Colombia. Retrieved from: https://www.redalyc.org/pdf/1790/179043373004.pdf
85. Malecki, E. J., & Moriset, B. (2008). *The digital economy*. New York: Routledge.
86. Maldonado, M. M. (June, 2019). Efectos sociales del ordenamiento territorial expansivo: la concentración de la vivienda social en Soacha. *Soacha Ilustrada*. Retrieved from: https://soachailustrada.com/2019/06/efectos-sociales-del-ordenamiento-territorial-expansivo-la-concentracion-de-la-vivienda-social-en-soacha/
87. Mallén, J. J. (2013). Participación en Facebook: accesibilidad, compromiso y empoderamiento. Versión Estudios de Comunicación y Política, *Nueva Época*, 31. ISSN 2007-5758. Retrieved from: https://versionojs.xoc.uam.mx/index.php/version/article/view/551/547
88. Marquet, O., Rıos Bedoya V., Miralles-Guasch, C. (2017). Local accessibility inequalities and willingness to walk in Latin-American cities: Findings from Medellın, Colombia. *International Journal of Sustainable Transportation, 11*, No.3, 186-196.
89. Martens, K. (2017) *Transport Justice: Designing Fair Transportation Systems*. Routledge: London, UK.
90. MAVDT, Ministerio de Ambiente, Vivienda y Desarrollo Territorial (2007). Decreto 4466, por el cual se reglamentan la Ley 3a de 1991, los Artículos 83 y 86 de la Ley 1151 de 2007 y se dictan otras disposiciones, Bogotá, Colombia.
91. Melella, C. (2016). Migración y TIC: Identidades andinas en Facebook. La trama de la Comunicación, Vol. 20, n.1 (2016). pp.73-88. Retrieved from: https://latrama.fcpolit.unr.edu.ar/index.php/trama/article/view/563/418
92. Méndez, L. A., Hincapié, M. A., Agudelo, C. F. (2014). Los Macroproyectos de Interés Social Nacional y su impacto frente al ordenamiento territorial. El caso de Ciudad Verde. Universidad de la Salle.
93. Miller, E. J. (2018). Accessibility: Measurement and application in transportation planning. *Transport Reviews, 38*(5), 551-555. DOI: 10.1080/01441647.2018.1492778.
94. Minvivienda (2014). Macroproyectos de Interés Social Nacional. Ministerio de Vivienda. Retrieved from: http://www.minvivienda.gov.co/viceministerios/viceministerio-de-vivienda/espacio-urbano-y-territorial/macroproyectos-de-inter%C3%A9s-social-nacional
95. Miralles, C. (2002). *Transporte y ciudad. El binomio imperfecto*. Barcelona: Ariel.
96. Momeni A., Pincus M., Libien J. (2018). Cross Tabulation and Categorical Data Analysis. In *Introduction to Statistical Methods in Pathology*. Berlin: Springer, Cham. DOI: https://doi.org/10.1007/978-3-319-60543-2_5
97. Moreno, A. (2009). *Análisis del comportamiento del transporte público en el corredor de la autopista sur como eje de integración regional*. Tesis de Maestría en Planeación Urbana y Regional. Pontificia Universidad Javeriana. Bogotá D.C.

© 2022 Global Journals

98. Moreno, C., & Rubiano, M. (2014). Segregación residencial y movilidad cotidiana en el contexto metropolitano. Un estudio a partir de las relaciones Bogotá – Soacha. *Territorios, 0*(31), pp. 133-162. DOI: http://dx.doi.org/10.12804/territ31.2014.06
99. Moreno-Luna, C. A. (2016). Segregación en el espacio urbano de Soacha. Transmilenio como herramienta integradora. *Revista de Arquitectura, 18*(1), 48-55. doi: 10.14718/RevAr.2016.18.1.5
100. Mountz, A. (2011). Where Asylum-Seekers Wait: Feminist Counter Topographies of Sites between States. *Gender, Place and Culture 18*, no. 3 (2011): 381–99.
101. Mychasiuk, R. & Benzies, K. (2011). Facebook: an effective tool for participant retention in longitudinal research. Child: care, health and development, Vol. 38, Issue 5 (September 2012). pp. 753-756. Retrieved from: https://doi-org.libproxy.ucl.ac.uk/10.1111/j.1365-2214.2011.01326.x
102. Nagelhus N. S. (2018). The cyber frontier and digital pitfalls in the Global South. *Third World Quarterly, 39*:5, 821-837. DOI: 10.1080/01436597.2017.1408403.
103. Notiflash Ciudad Verde (2020). 02/06/2020. Acelerado deterioro del Cerro La Chucuita en Ciudad Verde. Youtube. Retrieved from: https://www.youtube.com/watch?v=maD4EcatwlY
104. Noussan, M., Tagliapietra, S. (2020). The effect of digitalization in the energy consumption of passenger transport: An analysis of future scenarios for Europe. Journal of Cleaner Production, 258. DOI: 10.1016/j.jclepro.2020.120926.
105. Otálvaro Sierra, C. A. (2017). Racionalidad estatal y lógica social en la configuración del hábitat. *Bitácora Urbano Territorial, 27*(2), pp. 57-64.
106. Oviedo, D., Guzmán, L. A. (2020). Revisiting Accessibility in a Context of Sustainable Transport: Capabilities and Inequalities in Bogotá. Sustainability 2020, 12, 44641.
107. Oviedo, D., & Titheridge, H. (2016). Mobilities of the periphery: Informality, access and social exclusion in the urban fringe in Colombia. *Journal of Transport Geography, 55*, 152–164. DOI: 10.1016/j.jtrangeo.2015.12.004.
108. Pacheco-Vega, R. (2019). Literature Reviews. Raul Pacheco-Vega, PhD. Resources. Retrieved from: http://www.raulpacheco.org/resources/literature-reviews
109. Pelletier, N. (2010) Environmental sustainability as the first principle of distributive justice: Towards an ecological communitarian normative foundation for ecological economics. *Ecological Economics, 69*(10). 1887–94. DOI: 10.1016/j.ecolecon.2010.04.001.
110. Pérez-Del Hoyo, R., García-Mayor, C., Mora, H., Gilart-Iglesias, V., Andújar-Montoya, M. D., (2017). Improving Urban Accessibility: A Methodology for Urban Dynamics Analysis in Smart, Sustainable and Inclusive Cities. *Int. J. Sus. Dev. Plann. Vol. 12*, No. 3 (2017) 357–367
111. Periodismo Público (January, 2020). Saldarriaga dice 'No' a Ciudad Verde II y otros proyectos de vivienda interés social en Soacha. *Periodismo Público*. Retrieved from: https://periodismopublico.com/saldarriaga-dice-no-a-ciudad-verde-ii-y-otros-proyectos-de-vivienda-interes-social-en-soacha
112. Polese, M. Stren, R. (eds.). (2000). *The Social Sustainability of Cities. Diversity and the Management of Change*. Toronto-Buffalo-London: University of Toronto Press.
113. Power, A. (2012). Social inequality, disadvantaged neighbourhoods and transport deprivation: an assessment of the historical influence of housing policies. *Journal of Transport Geography, 21*(2012), pp. 39–48.
114. Preston, J., (2009). Epilogue: transport policy and social exclusion. Some reflections. *Transp. Policy, 16*(3), pp. 140–142.
115. Pucci, P., Vecchio, G., Bocchimuzzi, L., Lanza, G. (2019). Inequalities in job-related accessibility: Testing an evaluative approach and its policy relevance in Buenos Aires. *Applied Geography, 107*, 1-11. DOI: 10.1016/j.apgeog.2019.04.002
116. Pulido-Moreno, J. T. (2014). La iniciativa de Macroproyectos de Interés Social Nacional como aporte a la construcción de ciudades sostenibles en América Latina: Estudio de caso de Colombia, Ciudad Verde. Bogotá: Pontificia Universidad Javeriana.
117. Renard, V. (1994). *Objetivos en instrumentos para la gestión de la tierra urbana. Desarrollo urbano futuro*. Ministerio de Desarrollo Económico, DNP: Bogotá. pp. 323- 331.
118. Robertson, R., & Lechner, F. (1985). Modernization, Globalization and the Problem of Culture in World-Systems Theory. *Theory, Culture & Society, 2*(3), 103-117.
119. Rodríguez, C., Peralta-Quirós, T., Guzman, L. A., & Cárdenas Reyes, S. A. (2017). Accessibility, affordability, and addressing informal services in bus reform: Lessons from Bogotá, Colombia. *Transportation Research Record: Journal of the Transportation Research Board, 2634*, 35–42.
120. Rodríguez-Porrero, C., Gil-González, D. (2014). Ciudades amigables con la edad, accesibles e inteligentes. Madrid: Centro de Referencia Estatal de Autonomía personal y Ayudas Técnicas-CEAPAT. 25º aniversario CEAPAT. Retrieved from: http://riberdis.cedd.net/handle/11181/4198
121. Rogan, M., Cichello, P. (2017). Can informal employment actually reduce poverty? *WIEGO Blog*. Retrieved from: http://www.wiego.org/blog/can-informal-employment-actually-reduce-poverty

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122. Sabatini, F., Rasse, A., Mora, P., Brain, I. (2012). ¿Es posible la integración residencial en las ciudades chilenas?: Disposición de los grupos medios y altos a la integración con grupos de extracción popular. *EURE (Santiago), 38*(115), 159-194. DOI: 10.4067/S0250-71612012000300008.
123. SDM - Secretaría Distrital de Movilidad (2011). Encuesta de movilidad 2011. Secretaría Distrital de Movilidad, Steer Davies Gleave, and Centro Nacional de Consultoría. Retrieved from: https://www.simur.gov.co/portal-simur/datos-del-sector/encuestas-de-movilidad/
124. Stables, A. (2013). The unsustainability imperative? Problems with 'sustainability' and 'sustainable development' as regulative ideals. *Environmental Education Research, 19*(2), 177-186.
125. Shaftoe, H (2000). Community safety and actual neighbourhoods. In Barton, H (ed.). *Sustainable communities: The potential for eco-neighbourhoods*. Earthscan Publications, London.
126. Stucker, D. (2009). Environmental Injustices, Unsustainable Livelihoods and Conflict: Natural Capital Inaccessibility and Loss among Rural Households in Tajikistan. In Agyeman, J., Ogneva-Himmelberger, Y. (Eds.). *Environmental Justice and Sustainability in the Former Soviet Union*. Cambridge: MIT Press.
127. Sumalee, A., Ho, H. W. (2018). Smarter and more connected: Future intelligent transportation system. IATTS Research, Vol. 42(2), pp. 67-71. DOI: 10.1016/j.iatssr.2018.05.005.
128. Székely, M., & Mendoza, P. (2015). Is the decline in inequality in Latin America here to stay? *Journal of Human Development and Capabilities, 16*(3), 397–419. DOI: 10.1080/19452829.2015.1050320.
129. Titheridge, H., Christie, N., Mackett, R., Oviedo Hernández, D., Ye, R. (2014). *Transport and Poverty. A review of the evidence*. University College London.
130. Tonkiss, F., (2013) The contradictions of Informality. In *Cities by design: the social life of urban form*. Cambridge: Polity. pp. 91-112.
131. Torres-González, J. (2012). Movilidad y planeación participativa en Bogotá y Medellín: Relación con ciudades de Colombia y Suramérica. *Análisis Político, 74*, Bogotá, enero-abril, 2012: pp. 29-48
132. Tranos, E., Reggiani, A., Nijkamp, P. (2013). Accessibility of cities in the digital economy. *Cities, 30* (2013) 59-67. DOI: 10.1016/j.cities.2012.03.001.
133. Tufekci, Z. & Wilson, C. (2012). Social Media and the Decision to Participate in Political Protest: Observations from Tahrir Square. *Journal of Communication* (62), 363-379.
134. Van Wee, B., Geurs, K. (2011). Discussing equity and social exclusion in accessibility evaluations. *European Journal of Transport and Infrastructure Research, 11*(4), 350-367.
135. Van Wee. B., Chorus C., Geurs, K. T. (2012). ICT and accessibility: Research synthesis and future perspectives. In *Accessibility Analysis and Transport Planning*. NECTAR Series on Transportation and Communications Networks Research, pp. 37-53. Cheltenham: Edward Elgar Publishing.
136. Vargas-Sáenz, M. E. (2016). Empresas Sociales: primeros pasos teóricos y metodológicos de una apuesta innovadora para el territorio. In Vargas Sáenz, M. E., Gosetti, G., Tacconi, G., Eslava Gómez, A., Rendón Vera, J. S. (Eds.). *Territorio, Trabajo e Innovación: Cuadros teóricos y perfiles metodológicos para un estudio interdisciplinario*. Medellín: Universidad EAFIT, EAFIT Social.
137. Velásquez, C. M. (2012). Vivienda social y ordenamiento territorial en Medellín durante el periodo 2006-2011. Pasos hacia la segregación residencial socioeconómica. *Territorios 27*, pp. 181-197.
138. Vecchio, G. (2017) Democracy on the move? Bogotá's urban transport strategies and the access to the city. *City, Territory and Architecture, 2017*, 4, 15.
139. Vecchio, G., (2018). Producing Opportunities Together: Sharing-Based Policy Approaches for Marginal Mobilities in Bogotá. *Urban Science 2018*, 2, 54, DOI: 10.3390/urbansci2030054.
140. Vecchio G., Tiznado-Aitken, I., Hurtubia, R. (2020) Transport and equity in Latin America: a critical review of socially oriented accessibility assessments. *Transport Reviews, 40*: 3, 354-381, DOI: 10.1080/01441647.2020.1711828.
141. Vecchio G., (2020). Microstories of everyday mobilities and opportunities in Bogotá: A tool for bringing capabilities into urban mobility planning. *Journal of Transport Geography, Vol. 83* (2020) 102652. Retrieved from: https://www.sciencedirect.com/science/article/pii/S0966692319302662
142. Vorley, B. (2017). What role for informal markets in achieving sustainable and inclusive food systems? *GREAT Insights Magazine, Vol.6*, Issue 4. September/October 2017.
143. United Nations (2018). Bogotá, Colombia. The Population Division of the Department of Economic and Social Affairs. United Nations. Retrieved from: https://population.un.org/wup/
144. Urry, J. (2008). Mobilities and Social Theory. In Turner, B. S. (Ed.). *The New Blackwell Companion to Social Theory*. Hoboken, NJ: Blackwell Publishing Ltd. pp. 475-495.
145. Urry, J., Sheller, M. (2006). The New Mobilities Paradigm. *Environment and Planning, vol. 38*, pp. 207-226
146. Wheeler, D. C., & O'Kelly, M. E. (1999). Network topology and city accessibility of the commercial Internet. *Professional Geographer, 51*, 327–339.

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147. Wood, A. (2015). The politics of policy circulation: unpacking the relationship between South African and South American Cities in the adoption of bus rapid transit. *Antipode 47*(4): 1062–1079.

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