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Deindustrialisation and the politics of subordinate degrowth: The case of Greater Buenos Aires, Argentina

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Abstract

Cities in low- and middle-income countries have experienced deindustrialisation as localised agglomerations that historically served domestic and regional markets have become exposed to highly productive global value chains as capital has been (re)allocated to primary sectors. State, corporate and social actors have responded to economic decline by embracing a range of coping and adaptation strategies, some of which are consistent with degrowth, but they are often combined with business-as-usual initiatives in pursuit of economic growth. We refer to this as *subordinate degrowth* because localised responses are conditioned by the subordinate position of countries and cities in the global economy. While we acknowledge its divergence from ‘pure’ ideal-type degrowth, we do not dismiss the transformative potential of incremental change. Indeed, we argue that any realistic strategy to spatialise degrowth within cities must recognise the indeterminacy and messiness of urban politics. We employ subordinate degrowth as an analytic to interpret responses to deindustrialisation and economic decline in Buenos Aires, Argentina. Our analysis attends to three meso-level blind spots that characterise much degrowth scholarship, between (1) particular and universal, (2) advanced-industrial and agrarian ideal-types and (3) past/current socio-technical regimes and ‘pure’ degrowth.

Keywords

Buenos Aires, degrowth, deindustrialisation, financialisation, urban politics

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摘要

低收入和中等收入国家的城市经历了去工业化，成为历史上服务于国内和区域市场的本地化集聚地，并且随着资本被（重新）分配到初级部门而暴露于高生产率的全球价值链。国家、企业和社会行为者通过采取一系列应对策略和适应策略来应对经济衰退，其中一些与去增长相一致，但它们通常与追求经济增长的老一套举措相结合。我们将其称为从属去增长，因为本地化反应取决于国家和城市在全球经济中的从属地位。虽然我们承认它与“纯粹的”理想型去增长存在差异，但我们并没有忽视渐进式变革的变革潜力。事实上，我们认为，任何在城市内实现去增长的现实战略都必须承认城市政治的不确定性和混乱性。我们采用从属去增长作为分析手段，来解释阿根廷布宜诺斯艾利斯对去工业化和经济衰退的反应。我们的分析涉及三个中观层面的盲点，这些盲点是许多去增长学术研究的重点，它们是：（1）特殊和普遍，（2）先进工业和农业理想类型以及（3）过去/当前的社会技术制度和“纯粹”去增长。

关键词

布宜诺斯艾利斯、去增长、去工业化、金融化、城市政治

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Introduction

Degrowth is a socio-political response to impending ecological catastrophe. As humans continue to exploit and degrade ecosystems at a rate that threatens to surpass planetary boundaries, degrowth theorists and activists have advocated reducing the use of energy and resources (Kallis et al., 2012). This would result in qualitative and quantitative changes to economic activity under the existing socio-technical regime. Although there is a consensus that humans urgently need to limit their use of resources, degrowth runs up against hardnosed policy making because it necessitates purposeful scaling back of economic activity. Its operationalisation would surely result in an economic shock, which degrowth theorists argue could be cushioned by implementing policies that engender equitable political-economic outcomes and broad-based wellbeing. Thus, degrowth's distributional politics raise a series of complex questions. Who should bear the brunt of reduced energy/resource use and concomitant reduction of the social

surplus? What places should be encouraged – or forced – to reduce their consumption of energy/resources, and at what scale should policy interventions be situated? Implicit in these questions is the assumption that the impacts of reduced energy/resource use and economic output are unlikely to be distributed equally, so a more straightforward question is: how can we ensure that the very same communities that suffered from capitalism's excesses, are not forced to make the most significant sacrifices in attempts to forestall global environmental calamity?

These questions animate this article's reflection on what the politics of degrowth might actually look like for cities in middle-income countries that defy easy classification into ideal-typical categories such as 'advanced industrial' and 'agricultural'. Indeed, many of these cities have long industrial histories, yet they are at a crossroads having recently experienced deindustrialisation in the context of global economic restructuring. The most recent wave of deindustrialisation affected low- and middle-income countries in particular,

and Rodrik (2016) demonstrates convincingly that societies in Sub-Saharan Africa and Latin America experienced industrial decline as they struggled to either join or compete with highly productive global value chains. The implementation of neoliberal restructuring policies in the 1990s and 2000s exposed domestic producers to competition from global value chains and commonly led to deindustrialisation and the (re-)primarisation of the economy at the national scale. Thus, cities across Latin America and Sub-Saharan Africa experienced deindustrialisation while national economies underwent a process of re-primarisation. Rather than command and control centres from which lead firms manage resource extraction, production, circulation and distribution, these cities are incorporated into production processes on subordinate terms that inhibit their ability to create, enhance or capture value (see Coe et al., 2004).

In response to urban decline, coalitions of place-based actors whose livelihoods and wellbeing are tied to a city/region engage in a politics of adaptation. Scholarship focused on these ‘degrowth machines’, ‘decline machines’ or attempts to deal with ‘shrinking cities’ (Martinez-Fernandez et al., 2012; Schindler, 2016; Wilson and Heil, 2022) reveals that these coping strategies have an ambiguous relationship with degrowth. Neoliberal approaches and market interests dominate initiatives to manage urban decline in ways that are presented as ecologically sustainable and socially inclusive (Béal et al., 2019; Clement and Kanai, 2015; Rhodes and Russo, 2013). Indeed, it is clear that locally-based actors rarely reduce their energy/resource use intentionally, and even when they do embrace progressive components of degrowth, these are often combined with contradictory growth-oriented policies. However, for Kallis et al. (2018) adaptation to decline only constitutes degrowth if

communities intentionally embrace expansive and rapid restructuring, and implement a ‘new normal’ whose throughput of energy and resources is less than the pre-decline regime. Furthermore, this regime must be underpinned by a purposeful effort to establish institutions that animate an equitable political economy. This is consistent with much scholarship on degrowth, which presents it as a normative ideal-type, whose realisation would require an intentional and comprehensive ‘big-bang’ reform. However, the purposeful implementation of this reform package is unlikely in cities where the range of options available to place-based actors is constrained by the city and country’s subordinate position in the global economy.

Drawing on scholarship surrounding ‘subordinate financialisation’ (Bonizzi et al., 2015; Bortz and Kaltenbrunner, 2018), we propose the notion of *subordinate degrowth* to describe urban politics of (impending) decline in cities that are incorporated into the global economy on highly unequal terms. Subordinate degrowth is the product of incremental adaptations conditioned by macro-economic whiplash and it prioritises maintaining living standards over reducing resource use. While we acknowledge its indeterminate and contradictory nature in relation to degrowth, we argue that it serves as a starting point from which gains can be consolidated and progressive socio-ecological urban governance regimes can evolve. Furthermore, its indeterminacy draws attention to three meso-level blind spots in much degrowth scholarship between (1) an intermediate stage of extant growth-oriented regimes and the implementation of degrowth, (2) advanced-industrial and agrarian ideal-types and (3) case studies at very local scales and grand prescriptions of what should be done in general. As such, we hope that the identification of subordinate degrowth will contribute to a multi-scalar understanding of the politics and practice of

degrowth in cities (see Krähmer, 2022; Smith et al., 2021).

We deploy the notion of subordinate degrowth as an analytic to evaluate and understand the ongoing efforts of various actors in Greater Buenos Aires, Argentina, as they cope with long-term economic decline and uncertainty. While the country witnessed storied industrial growth until the mid-20th century, deindustrialisation became a societal concern as early as the mid-1970s, and the economic crisis of the early 2000s shook society to its very core. This marked an inflection point in the metropolitan geography of Buenos Aires, Argentina's core industrial and economic region (Schorr, 2012; Svampa, 2005). City-based actors recognise that the basis for urban and regional growth will not be a return to large-scale industries with state protection in relative autarky, and hence, they are forced to think creatively and experiment in their attempts to stabilise a political-economic regime that can foster life-worlds worth reproducing. Actors prioritised maintaining living standards rather than reducing energy/resource use, yet many of the adaptation strategies of activists, municipal governments and owners of small- and medium-sized enterprises (SMEs) were consistent with degrowth. These strategies were combined, however, with growth-oriented business-as-usual policies. Our argument is that this messiness is part and parcel of urban politics, so rather than being dismissed as inauthentic degrowth, progressive incremental gains should be consolidated and institutionalised.

This article has four sections. In the following section we briefly introduce the concept of degrowth, and we argue that degrowth scholarship tends to exhibit meso-level blind spots. We then propose the notion of *subordinate degrowth* to attend to these blind spots. In the third section we present original research from Greater Buenos Aires and interpret the metropolitan region's

ongoing struggles with deindustrialisation and efforts to adapt through the lens of subordinate degrowth. In the final section we conclude by calling for the potential of subordinate degrowth to encourage progressive and sustainable outcomes to be taken seriously.

The case for *subordinate degrowth*

The spectre of breakdown and collapse hangs over human civilisation (see Tainter, 1988), as a series of wickedly inter-related problems threaten the planet's capacity to support human and non-human life. This is due to the fact that since the industrial revolution humans have consumed fossil fuel at a rate that has resulted in the warming of the earth's atmosphere, which has dramatically altered ecosystems worldwide. There is an urgent need to reduce the emission of greenhouse gases (see Intergovernmental Panel on Climate Change, 2022; Welsby et al., 2021), and under the existing socio-technical regime this would result in economic decline. This reality is ignored by global policy makers whose calculations of greenhouse gas emissions and reductions optimistically incorporate future technological advances (e.g. carbon capture and storage) (Keyßer and Lenzen, 2021). This is true for even left of centre progressives who advocate a Green New Deal, for whom technological fixes to forestall ecological collapse also promise a round of capital accumulation. Not only will the Green New Deal save the planet, they argue, but it is fiscally responsible because it will create jobs and usher in an era of economic growth and prosperity in lagging regions (see Mastini et al., 2021).

Critics argue convincingly that it is impossible to decouple economic growth from resource use on a global scale (see Hickel and Kallis, 2020), so policies that encourage, say, the massive expansion of renewable energy or subsidies for consumer purchases

of electric vehicles, are highly unlikely to reduce energy and resource use below the threshold that would forestall global warming. The fact that averting environmental catastrophe in the not-so-distant future requires a reduction of energy and resource use as well as a shrinking economy is the cornerstone of degrowth. The term entered academia from activist circles in the 2000s (see Demaria et al., 2013), and it is a heterogeneous body of scholarship whose proponents emphasise the need to transition to new ways of living. Put simply, advocates of degrowth assert that 'it is possible to organise a transition and live well under a different political-economic system that has a radically smaller resource throughput' (Kallis et al., 2018: 292). The regimes they propose tend to be animated by bottom-up decision-making, and are geared towards equitable distribution of the social surplus in pursuit of wellbeing (rather than capital accumulation).

There is considerable scope for debate within these parameters. For example, the extent to which modern (and future) technology is inherently growth-oriented or whether it can underpin post-capitalist alternatives is one point of contention (see Kallis, 2021; Kerschner et al., 2018; March, 2018). It is impossible to speak to a single body of degrowth scholarship given these debates and the field's heterogeneity, yet most degrowth scholarship is characterised by one or more meso-level blind spots. First, as noted above, there is a fine line between degrowth and involuntary adaptation to decline. Kallis et al. (2018: 302) establish the distinction as follows: '[i]nvoluntary declines are not degrowth in themselves, and countries in recession or depression are not degrowth experiments, unless communities make virtue out of necessity, building low-impact livelihoods that enhance wellbeing and equality'. If degrowth is an intentional choice rather than an adaptation to crisis, then its realisation is surely a political

process that will include an intermediate stage between a contemporary growth-oriented regime and a future underpinned by principles of degrowth (see Smith et al., 2021). Most degrowth scholarship downplays the importance of – or obscures altogether – this highly political transitional stage in which growth-oriented regimes have been rejected but degrowth has not been realised.

Second, the relationship between degrowth and alternatives to mainstream development is a point of debate and reflection (see Escobar, 2015; Kothari et al., 2019). Hickel (2021a: 2) maintains that degrowth is 'not just a critique of excess throughput in the global North; it is a critique of the mechanisms of colonial appropriation, enclosure and cheapening that underpin capitalist growth itself' (also see Hickel, 2021b). The answer for Southern states, then, is to 'shift away from their enforced role as exporters of cheap labour and raw materials, and to focus instead on developmentalist reforms' (Hickel, 2021b: 1109). This anti-imperialist position faces very real structural constraints imposed by the global economy that have vexed development economists for decades (for a critique see Trainer, 2021), but more importantly, it establishes a rigid distinction between North and South and ignores middle-income countries that defy classification. Thus, if the limits to degrowth are fixed at 'advanced industrial' countries and alternatives to development – or 'post-development' – are appropriate for their 'agrarian' counterparts, what is the appropriate path for middle-income countries that sit uneasily between these categories? In our view, this question is a blind spot in much degrowth scholarship.

Third, much of the degrowth scholarship embraces a comprehensive transformation, and as Hickel (2021a, 2021b) and Trainer's (2021) debate demonstrates, degrowth theorists are grappling with big questions surrounding what is to be done at the global

scale. However, much research on actually-existing degrowth is situated at the micro-scale, and focuses on ‘new types of common territories and institutions [that] are produced in and through a situation of disaster’ (Demaria et al., 2019: 437; Gearey and Ravenscroft, 2019; Nirmal and Rocheleau, 2019). Alternatively, there is focus on ‘territories which, through a mix of geographic, cultural or economic particularities, have been left on the periphery of growth-based development’ (Kallis et al., 2022). Thus, degrowth scholarship tends to focus on (1) global questions surrounding planetary boundaries and inequality between North and South and (2) actual experiments and adaptations that constitute degrowth at a local scale and/or peripheral territories. This leaves a missing meso-level, namely cities and regions. It is unclear whether degrowth politics at the urban scale will be implemented ‘from above’ as part of a global degrowth politics, or ‘from below’ as experiments are scaled up.

Limited research on the implementation of components of degrowth in cities or regions demonstrates that it is a highly charged political process (Cosme et al., 2017; March, 2018). In a number of cases, alternative social, economic and ecological futures were imagined by city-based coalitions in response to the structural imposition of prolonged decline (Audirac et al., 2012; Béal et al., 2019; Boffey, 2020; Coppola, 2019; Eraydın and Özatağan, 2021; Florentin, 2011; Hospers, 2014; Martínez-Fernández et al., 2012). For example, Schindler (2016) referred to the coalition of actors that coalesced to re-imagine a non-Fordist future in Detroit after its bankruptcy as a ‘degrowth machine’. However, many of these initiatives comprise members of erstwhile ‘growth machines’ who would welcome a return to business-as-usual if it were feasible. In these cases, ‘decline’ can be employed as a discursive construct meant to catalyse an exclusionary and racialised process of urban

renewal (Wilson and Heil, 2022). Here decline not only highlights the existence of potential rent gaps, but it also exoticises cities and their residents, and serves as justification for growth-oriented interventions (Wilson and Heil, 2022). This explains the apparent contradiction between the discourse that justifies ‘shrinking cities’ in order to improve service delivery, and exclusionary outcomes of initiatives that manage decline (Béal et al., 2019; Rhodes and Russo, 2013). Nevertheless, envisioning radically different urban futures is a political process and there is no reason that all futures imagined in response to decline must be inherently growth-oriented (see Coppola, 2019). Diverse coalitions of urban actors may indeed enact progressive responses to decline, but they do not enjoy unlimited options when envisioning a different future. Just as decline in many cities was triggered by globalisation of the national economy and the internationalisation of production (Martínez-Fernández et al., 2012), the parameters of what is possible are also conditioned by a city’s relationship with the global economy, and it is to this that we now turn.

Contemporary deindustrialisation, urban decline and ‘subordinate degrowth’

The international division of labour has undergone a series of restructurings since the 1970s, whose manifestation in many ordinary cities is deindustrialisation. Deindustrialisation is commonly understood as the decline of industrial clusters whose economic fortunes are tied to the social and cultural fabric of communities (Bluestone and Harrison, 1980; High and Lewis, 2007). It is metonymic of the general decline of industrial heartlands that powered the post-war economic boom in the Organisation for Economic Co-operation and Development (OECD), but the globalisation of production precipitated deindustrialisation in Latin America and Sub-Saharan Africa where producers were already reeling from the

lowering of tariffs and trade barriers in the 1980s and 1990s. That shock resulted in deindustrialisation termed ‘premature’ by Rodrik (2016) because in comparison to the pattern observed in the OECD, it occurred before increases in wages for working classes and the growth of the service sector.

Urban scholars have confirmed that deindustrialisation manifests differently beyond the OECD in a range of ways (Pike, 2022; Schindler et al., 2020). First, many producers struggled to remain operational after the initial shock of market liberalisation. Some managed to adapt to the sudden exposure to global competition, and they constitute vestiges of 20th-century agglomerations but they are currently pitted against highly productive global value chains. Thus, contemporary deindustrialisation in low- and middle-income countries is the outcome of a competition between agglomerations of producers that have historically been protected by trade barriers and highly productive global production networks. Ultimately, agglomerations struggle to compete with networks. Second, deindustrialisation in many cities across Latin America is shaped by processes of re-primarisation as capital is diverted from urban industry to the production of primary commodities (e.g. resource extraction and agro-food processing) (Jenkins, 2015; Jepson, 2020; Taylor, 2016). Research has shown that cities located in resource-exporting countries with scant industry exhibit higher levels of poverty and inequality than their counterparts with comparatively robust manufacturing endowments (Gollin et al., 2016).

Processes of deindustrialisation and re-primarisation are unfolding alongside the mediation of cities’ relationship with the global economy through financialised networks. A single concise definition of financialisation is elusive, but most scholars recognise it as a set of institutions and practices that allocate resources, (future) profits and risk. While this

was historically done by banks through simple loans, a host of new actors engage in novel financial operations and offer services (Pike and Pollard, 2010). According to Lapavitsas (2013: 794) some of these activities constitute ‘new forms of profit [taking] that could even be unrelated to surplus value’ and through this ‘financial expropriation’, value created by producers in global production networks routinely ends up on the balance sheets of financial intermediaries. Geographers have shown that within expansive global production networks, value can be created by some actors (e.g. producers) and captured by others (e.g. retailers), so a major challenge for cities and regions is not only to integrate with production networks and create value but also to capture it (Coe et al., 2004). In this context, low- and middle-income countries are particularly disadvantaged by the fact that their integration with production networks is mediated by financialisation with ‘a subordinate character’ (Lapavitsas, 2013: 801), which inhibits them from capturing value that they create (Bonizzi et al., 2015; Bortz and Kaltenbrunner, 2018). Thus, subordinate financialisation is a condition whose precise manifestation differs from place to place (see Büdenbender and Aalbers, 2019; Choi, 2020), and can be due to a range of factors – e.g. their dependence on financial markets for operating capital, exposure to currency fluctuations, the necessity to borrow US Dollars (USD) – but the main point is that financialisation serves as a mechanism to subordinate places and lock in highly unequal relations of exchange with global actors (Choi, 2020: 210; see Pike and Pollard, 2010).

These dynamics are evident in many cities in middle-income countries that are neither command and control centres boasting headquarters of lead firms in global value chains, nor small settlements centred on trade and administration associated with agrarian societies. Their industrial histories preclude

alternatives that may be imaginable in local or peripheral places (see Kallis et al., 2022 for one case of actually-existing degrowth). Hence, we argue that in some instances the response of city-based actors to decline amounts to what we refer to as *subordinate degrowth*. Our use of ‘subordinate’ indicates positionality within power-laden and multi-scalar relations of global production that condition the politics of degrowth (see Krähmer, 2022 on multi-scalar analysis). In contrast to normative assumptions surrounding ideal-typical degrowth, this subordinate variety exhibits ambiguous priorities and inconsistencies. It is animated by agents of change that are not necessarily committed to degrowth in general, and for whom maintaining living standards above a certain threshold is prioritised over reducing energy and resource-use below a given threshold. They share a commitment to place and while subordinate degrowth may incorporate some progressive components that anticipate alternative futures, it does not constitute a fundamental rupture with capitalism writ large.

We are not sanguine about the socio-economic and ecological futures that subordinate degrowth is likely to engender. Özatağan and Eraydin (2021) urge caution, and argue that the celebration of purportedly alternative development trajectories can amount to a place-branding strategy. In this interpretation, alternatives that constitute degrowth-lite are like Trojan Horses that threaten to smuggle in urban entrepreneurialism that will unleash future cycles of growth. We sympathise with this argument because it is clear that many of the actors engaged in the urban politics of decline would happily embrace growth-oriented business-as-usual if it were a realistic option. Indeed, cities in decline have been laboratories for revanchist urban governance, such as legislation that enables dis-possession, novel modes of redlining and speculative bulk-buying of foreclosed

properties (Akers, 2013; Akers and Seymour, 2018; Safransky, 2020). However, the dismissal of subordinate degrowth not only precludes all but the most comprehensive ‘big bang’ reforms, but it also misses the messy nature of adaptations to prolonged urban decline, conditions imposed by the global economy, the diversity of actors involved and the range of their motivations. We argue that rather than an end in itself, subordinate degrowth is a means to make incremental gains that has the potential to be consolidated by progressive actors in the messy politics that characterise cities in decline and transition. The potentiality of this politics should not be dismissed simply because it includes trade-offs, reversals and compromises. Indeed, this messiness and complexity will almost surely be part and parcel of any attempt to transform degrowth into an urban political project. In the next section we mobilise the notion of subordinate degrowth in Greater Buenos Aires, which we consider an emblematic middle-income city whose industrial history precludes solutions that may be apt for agrarian societies, while its subordinate position in the global economy limits the options available in comparison to industrial cities in the OECD.

Subordinate degrowth in Greater Buenos Aires

In this section we situate the complex urban politics of subordinate degrowth in Greater Buenos Aires in the long decline experienced by Argentine industry that began after World War II. We then present primary research carried out in the metropolitan region between 2019 and 2020. Our analysis focuses on two municipalities with a long history of industrial development and more recent experiences of deindustrialisation; one in the densely developed inner-ring suburbs immediately adjacent to the central city (San

Martín) whose industrial profile remains strong, and the other 45 miles away in a peri-urban region with mixed industrial, agricultural, tourism, services and residential land uses (Luján). Our study's initial aim was to ascertain ways in which state, corporate and social actors coped with deindustrialisation in such locations where a major growth in advanced producer services had not occurred. In contrast to the thorny politics in the wealthier and more internationally oriented central city of Buenos Aires (Kanai, 2011), both San Martín and Luján exhibited political alignment between the local, provincial and national governments and a common populist discourse of inclusion and redistribution anchored in Peronist party politics.

At the time of our field research, the policy priority across the board was to recover from multiple years of economic recession and social impoverishment, which our interviewees largely attributed to the previous national administration and its market-oriented policies. In fact, Zanotti et al. (2021) show that the fiscal and deregulatory reforms undertaken under President Macri (2015–2019) constitute a third wave of neoliberalisation in Argentina, which have accelerated the country's long process of industrial decline, first with the military junta's attacks on the industrial sector and its unions in the 1970s and then with President Menem's unconditional alignment with the Washington Consensus policy package (see also the section on Argentina in Schindler et al., 2020). Such challenges of pursuing a less disadvantageous local insertion in the Argentine economy and global value chains conditioned the parameters of possibility for all respondents and provided the two sites with intrinsic interest as case studies of the complex urban politics of subordinate degrowth.

We conducted in-depth interviews with small- and medium-sized enterprises in both locations (5), one professional consultant

contracted with a municipality and one former national government official (from the Macri administration), (former) workers and union officers/activists (4). We also conducted a focus-group discussion and site visits (i.e. industrial facilities and an outreach centre for local businesses) with two municipal officials. We conducted interviews with eight industrial policy experts that included economists and academics. Finally, we conducted site visits to industrial spaces that have been converted to house smaller businesses. We also collected policy reports and economic surveys and conducted a literature review of the local grey and academic literature in Spanish focusing on questions of deindustrialisation and the politics of urban restructuring. It is noteworthy that we found no mention of degrowth or related concepts from respondents nor among this literature. Activists and former labourers invoked a discourse of mutual aid and self-sufficiency that was broadly consistent with degrowth, while government officials and local entrepreneurs genuinely embraced components of degrowth alongside business-as-usual growth machine politics.

Economic decline in Argentina

Argentina recorded storied economic growth in the late-19th and first half of the 20th centuries as it transitioned from an agrarian to an urbanised industrial society. This sustained growth episode came to an end after the Second World War as the country became inward-looking, and with exceptions of brief periods in the 1960s and 1990s when it registered moderate growth, Argentina's post-war political economy has been characterised by alternating periods of slow and rapid economic decline (Cohen, 2012; Conde, 2009; Waisman, 1987). Import-substitution in the post-war period protected non-competitive firms that produced consumer goods, and the government combined

Keynesianism and populism under the leadership of Juan Perón (Conde, 2009). This regime protected domestic industry, and the foreign exchange generated by the agricultural sector fuelled the growth of the urban manufacturing base (Waisman, 1987: 60–65). As a result, there was significant antagonism between inward-looking urban-industrial interests (including labourers and capital) and agricultural producers that were, by comparison, competitive on world markets (Waisman, 1987). The military dictatorship supported the landed classes in this conflict and in addition to persecuting members of trade unions, it disciplined the industrial bourgeoisie by exposing them to foreign competition. Thousands of Argentine factories and businesses closed during the 1980s and 1990s (Cohen, 2012: 42). Thus, as the dictatorship's power was ebbing in the early-1980s, Argentine society was not only traumatised by thousands of disappearances, but the economy was characterised by indebtedness, fiscal instability and hyper-inflation (Cohen, 2012: 43).

Carlos Menem won an election in 1989 on promises to reduce inflation and usher in macro-economic stability. He combined a rather standard neoliberal regulatory regime with a law that pegged the Argentine Peso to the USD. A short-lived period of growth came to an abrupt end in 1995 and the late-1990s were characterised by further deindustrialisation and high unemployment. In this context the government struggled to maintain the Peso's convertibility to the USD, and it defaulted on its external debt in 2001, plunging the country into economic freefall that led to an unprecedented social crisis. According to Cohen (2012: 62) the crisis 'was the culmination of a process of economic decline in which Argentines were forced to recognise that the way they had organized political and economic life did not work'. In other words, the crisis represented a rupture with the past – land and labour

that were historically mobilised in pursuit of industrial production were suddenly idle and it was clear they would not be reanimated under the subordinate conditions in which Argentina was inserted into the global economy. These structural conditions were never reversed.

The economy stabilised under the decade-long leadership of Néstor and Cristina Kirchner, but Argentina's position in the global economy remains stubbornly subordinate with an increasing dependence on the primary sector – initially with the export of agricultural commodities with high demand in world markets such as soy and more recently with mining and extractive industries. Whilst various integrated programmes to promote industrial resurgence were attempted in the 2000s with substantial subsidies and other support policies, deteriorating government finances and a political backlash against tax on commodity exports led to their abandonment in the 2010s (Kulfas, 2018). The second half of the past decade witnessed a further return to neoliberal approaches, especially during Mauricio Macri's term as president (2015–2019), with an important exception of the expansion of infrastructure networks (albeit funded largely through public-private partnerships). Infrastructural improvements combined with market liberalisation and currency devaluation favoured large globally competitive firms with interests in the primary sector, and led to tension surrounding resource extraction in many regions while it accelerated industrial decline and downward social mobility in urban areas (Santarcangelo et al., 2019). Consequently, industrial output never recovered and after hovering around one-fifth of the country's gross domestic product throughout the Kirchner years, industry's share of the economy lost ground vis-à-vis primary commodities. Currently, manufacturing's share is less than 20% of the Argentine economy, and about one-

fourth of its value added consists of food production, with the majority of industrial exports based on agriculture (Zanotti et al., 2021).

Coping with decline in Greater Buenos Aires

In the wake of the 2001 economic collapse demonstrators from diverse socio-economic backgrounds took to the street *en masse* to protest what they considered economic mismanagement and the imposition of a neoliberal model leading to generalised impoverishment (Epstein, 2006; Kanai, 2010, 2011). All but the most affluent were forced to rapidly adapt expectations and living standards to the new reality. For example, barter clubs proliferated in middle-class neighbourhoods in an attempt ‘to construct collective alternatives to impoverishment’ (Bombal and Luzzi, 2006: 152; see Svampa and Corral, 2006). Many of these initiatives were geared towards cushioning the immediate consequences of the economic crisis, and they were discontinued in the following years as the economy stabilised. For many erstwhile industrial labourers, however, the stabilisation of the economy under the Kirchners did not fundamentally reduce their precarity and many remain tied to support networks that originated in response to the 2001 crisis (Clare et al., 2018).

Many of their activities are consistent with the principles of degrowth geared towards an equitable distribution of the social surplus, and range from advocating for informal sector workers (e.g. waste collectors, known locally as *cartoneros*) to providing mutual support to members in need. Indeed, many individuals remain un- or under-employed in the formal sector, and piece together livelihoods from insecure formal and informal work (Gago, 2017: 32). The result is what Gago (2017: 19) terms ‘microproletarian economies’, which are

characterised by informality and precarity, as well as ingenuity that has the ‘capacity to construct, conquest, liberate, and also defend space’. One long-time activist explained that many of the active social networks that offer mutual aid and support were established in the aftermath of the 2001 crisis. Her organisation seeks to connect members with any government subsidies and work opportunities that may become available, whilst others seek to articulate a more self-sustaining ‘popular economy’ based on various activities including informal recycling. A major component of many networks geared towards mutual support surrounds food security. One organisation leases space from public authorities where it operates a relatively large collectively-managed vegetable garden, and many of its members are former labourers. A member of the cooperative who worked there for three years explained how he had previously been employed in a series of precarious positions in the textile sector where wages were frequently withheld. He began working at the garden after losing a job as a result of an argument over wages with an employer, and although he was forced to take a pay cut, working at the garden offers stability and a food supplement. Both of these respondents were driven to participate in activist milieus out of necessity, yet they articulated positions on social justice that resonate with degrowth. And although their political activity was not motivated by the need to reduce energy or resource use, it was not inconsistent with these objectives either.

The response to decline from government officials exhibits a far more ambiguous relationship with degrowth. During the Macri years, the national government embraced national spatial planning that largely favoured firms outside Greater Buenos Aires (and with a sectoral focus on agribusiness and resource extraction). A spatial plan – Plan Belgrano – favoured infrastructure

construction in historically isolated areas in north Argentina, and the cornerstone of transnational spatial planning was the construction of a bi-oceanic corridor that would facilitate exports to Asia. According to one high-ranking official involved in spatial and industrial planning in the Macri administration, the lack of integrated infrastructure inhibited the development of highly competitive sectors:

In Argentina, you find places that feature major tourist attractions but do not develop because there is no basic water infrastructure ... no gas supply in regions that would otherwise develop competitive industries ... and yet some regional airports are underutilized and local producers fail to identify business opportunities. (Personal communication, 2020)

In his perspective, a future-looking policy had to focus beyond Buenos Aires whose manufacturing base was too heterogeneous and small-scale to be globally competitive. On one hand, he explained, SMEs in a host of sectors (e.g. printing) could remain operational because they occupied niches in which East Asian firms could not compete. On the other hand, however, they are unable to scale up production, compete globally and export. This sectoral diversity meant that a sizeable manufacturing base would remain in Buenos Aires, but 'Detroit would not occur ... due to this lack of specialization' (personal communication, 2020).¹ In fact, growth of manufacturing sectors in Buenos Aires with scant potential to export represented a problem according to this former national government official because it required 'excessive imports' of capital goods and inputs. 'Growth leads to excessive imports and sows the seed of new crisis', he explained, and in contrast 'soy remains such an attractive growth path for Argentina [because] it brings the dollar in'. Thus, the Macri government sought to target public investment in support of sectors with the

potential to export that were largely outside of Buenos Aires (e.g. soy and natural gas). Meanwhile, it viewed the expansion of manufacturing SMEs within the metropolitan area as problematic given their relative inability to export. At risk of stating the obvious, this was not inspired by degrowth, but rather, the growth of manufacturing SMEs in Buenos Aires was seen as an inefficient allocation of resources that would hinder growth in export-oriented sectors. This view alienated the Macri administration from many municipal governments in Greater Buenos Aires who felt abandoned or even under siege.

Municipal governments interpreted the national government's policies as antagonistic, and they developed strategies designed to help local manufacturing enterprises cope with decline. Under the constraints listed above, these policies were largely unable to pursue growth machine politics. In San Martín, an industrial district where we conducted fieldwork, the municipal government developed strategies that amounted to an eclectic mix incorporating a number of components that were not inconsistent with degrowth. The premise of the overall strategy was that the municipality is first and foremost an industrial district, whose residents are engaged in manufacturing either as workers or owners of SMEs. Thus, it prioritised the maintenance of the industrial economy and working-class character of the municipality. The management of land was integral to these efforts. The area was under pressure from real estate developers who sensed the existence of a sizable rent gap, given the area's proximity to the city centre. The key, then, was to prevent industrial land from becoming vacant, and to this end authorities focused on aiding 'reconversion' to divide large-scale industrial space into smaller units for use by SMEs in the form of industrial parks.

Support services for local SMEs were concentrated in a publicly financed business hub. Here, meeting space was provided and municipal employees assisted local firms network with one another. They also provided market research and firms could apply for small grants for various purposes. Of the many activities of the business hub, two are worth mentioning because they highlight the contradictory nature of the hub's activities in terms of its relationship with degrowth. First, there were genuine attempts to help firms reduce their overall resource and energy usage. The focus on 'energy efficiency' combined environmental, economic and social concerns amidst rapidly rising energy prices in Argentina. With a reported 4000% increase for final consumers, and energy costs climbing from approximately 5% to 25% of production costs for SMEs in recent years, the municipality introduced multiple processes to reduce local energy-dependency, including solicitation of international assistance towards an energy transition. While these efforts to enhance the 'sustainability' of production in the district are genuine, the business hub also encourages the integration of local enterprises into value chains geared towards resource extraction, particularly fracking. To this end, the municipality supports delegations of local enterprises to travel to resource frontiers in central Argentina. While this partly reflects the reality that resource extraction has become one of Argentina's most dynamic sectors in recent years, it also signals a novel role for SMEs based in Buenos Aires. As noted above, competitive and export-oriented sectors such as industrial agriculture and resource extraction have historically been viewed in opposition to industry based in Buenos Aires whose focus is the domestic market. The integration of SMEs into these sectors offers a potential route to export-oriented growth and some even supply

primary clusters outside the country, such as one producer who focused on feed for harvested salmon in southern Chile. However, not all SME owners are interested in expanding their operations.

Many SME owners exhibit risk-averse behaviour and prioritise long-term survival over quarterly profits. One business owner referred to this as *sistema almacén*, which translates loosely into *mom-and-pop shop system*, and is characterised by only spending money that you already have and not borrowing to invest in capital goods in expectation of future profits (personal communication, 2020). The result is a near absence of growth, and business strategy is focused on adapting to change and geared towards survival. Some larger firms have stayed in business by purposefully scaling back production, and leasing land to smaller firms to maintain revenue streams. We encountered two cases in which large industrial complexes historically occupied by vertically integrated textile firms were converted to industrial parks that now house numerous small firms producing a range of goods for domestic and regional consumption. In one instance, the company divested from production altogether, and its sole source of revenue is from leasing industrial workspace. In a second case, a large family-owned and vertically integrated textile enterprise that produced finished goods from raw cotton went bankrupt during the 2001 crisis. It was acquired by an entrepreneur who explained how, in collaboration with other producers, he established a 'network of direct sales' without intermediaries whose members used cash – rather than credit from banks – to operate on a day-to-day basis (personal communication, 2020). When the immediate threat of bankruptcy subsided, this entrepreneur invested in capital goods to enhance competitiveness in the production of fabric. In other words, the firm reduced overall activity and resource use – consistent with

degrowth – to modernise its operations in one narrow segment of the value chain. The disintermediation of production meant that a significant amount of industrial workspace was vacant, and the grounds were converted into an industrial park with workshops for small firms.

When we visited the park in 2020 there was a relatively lively atmosphere. A canteen was full of workers from various enterprises, and the former canteen that fed the workforce from the 1950s until the 1990s had been converted into a museum documenting the industrial history of the park. Current occupants engage in a range of activity from food processing to the production of intermediate goods used locally in manufacturing processes. Some of the SMEs that occupied the units in the former textile complex have struggled, at least partly due to macro-economic conditions. One food producer purchased a subsidiary of a large multinational corporation in 2018, but inflation cut into earnings. This firm deferred payment of rent for two years. This was only possible because of the existence of trust between the owners of the business and the industrial park, and this was common among SMEs that mobilise inter-business networks to remain operational (rather than obtaining emergency loans from banks). The aversion to risk and the lack of ambition to scale up production was not universal. We visited one small workshop whose owner-operator had recently invested in capital goods from China. He explained that the machines reduced production costs to such an extent that he could export goods to Paraguay and Uruguay. Nevertheless, the overwhelming trend among SME owners was ambivalence towards scaling up, and this provoked consternation among municipal officials because it represented a missed opportunity to expand the tax base and generate jobs. According to a consultant who worked for the municipality:

[SMEs] don't reinvest in capital, they don't invest in people. At the moment they have to go big, [but] they don't. You know you're going to have some good years, but then you're going to have some bad years. Then you wait for tariffs [to protect you] and you still sell [products domestically]. (Personal communication, 2020)

However, the reticence to expand among SMEs has allowed many firms to survive through multiple crises. They are invested in the area and they support the municipal government's efforts to maintain the industrial nature of the district and inhibit real estate speculation. The same consultant remarked that: 'The small industry is family business. They are not thinking about "it's good to sell the land and build residential [real estate]" – no, they have land, a workshop, and they won't do that'.

In summary, workers, government officials and business owners have adapted to multiple crises since 2001. None of these actors embrace degrowth, yet their efforts cannot be easily classified as growth machine politics. Activists and former workers seek to maintain mutual support groups, yet their emphasis is on social reproduction and social justice rather than reducing energy or resource-use. National officials in the Macri government were mildly hostile to growth of businesses that were not export-oriented, but they made massive infrastructure investments to support sectors that they assessed as having growth potential. Meanwhile, municipal officials in industrial districts felt under siege and they launched a mix of policies that included the pursuit of energy transition alongside encouraging local firms to integrate in resource extraction on commodity frontiers. Many business owners are averse to growth, and instead, they prioritise long-term survival. None of this amounts to degrowth, but it is equally far from growth machine politics. Rather than prioritising growth at all costs, many actors seek to

forge lifeworlds worth reproducing, while they face common pressures related to Argentina's macro-economic instability, real estate interests, and vast social needs. The combination of these pressures provided justification for maintaining developmental policies in a world economic context that offers few options to middle-income countries dependent on foreign direct investment and technology transfer. The challenges posed by economic subordination at the global scale point to the need for place-based strategies and policies to more readily support de-economisation in a broader range of urban geographies that do not fit easily with a conceptual North–South divide due to both their industrial past and contemporary aspirations. The politics of subordinate degrowth may offer limited but much needed entry points for envisioning alternative futures under these conditions.

Conclusion: Subordinate growth versus infrastructure-led development

In this article we introduced the notion of subordinate degrowth as an analytic to apprehend the coping strategies of locally based actors in cities in decline, in medium-income countries whose position in the global economy can be described as subordinate. As noted, a host of cities across Latin America and Sub-Saharan Africa have experienced deindustrialisation as local agglomerations struggle to compete with highly productive global value chains, and domestic economic activity has been re-primarised. Actors based in these cities experience the global economy from a subordinate position, in the sense that (1) their domestic manufacturing firms struggle to compete or couple with global value chains and (2) financialisation inhibits them from capturing value that they do produce. These factors condition the efforts of city-based actors to cope with economic decline,

which are first and foremost geared towards maintaining living standards. Buenos Aires is illustrative of these dynamics, and our research demonstrated that the result is a messy and indeterminate urban politics that tends to combine some components consistent with the normative degrowth agenda with business-as-usual initiatives designed to re-start growth. A developmentalist logic tends to prevail, however, as the prevention of consumption from falling below a certain threshold is prioritised over the prevention of resource/energy usage from exceeding a certain threshold.

According to many of degrowth's leading theorists, it must be pursued intentionally and comprehensively (see Smith et al., 2021). Accordingly, adaptations to decline that we documented in this article do not constitute degrowth because they are pursued out of necessity and are incomprehensive. However, we argued that trade-offs and indeterminacy are part and parcel of urban politics, and hence, transformative frameworks such as degrowth are unlikely to be realised without a prolonged and messy period of experimentation and politicised struggle. Indeed, we find it difficult to envision an apolitical 'big bang' reform that would be willingly embraced by urban residents in the absence of some exogenous shock. Thus, any realistic strategy to operationalise degrowth at the urban scale must anticipate the processual nature of transformation, whose duration and form will vary from city to city, and will be shaped by the international political economy. In this context, an actionable politics of degrowth would seek to consolidate and defend even minor gains from being rolled back, while demonstrating their superiority over competing growth-oriented policies and practices. In this way, incremental efforts to adapt to economic decline in the context of subordination have the potential to accrue and be institutionalised.

These insights attend to meso-level blind spots that characterise much degrowth scholarship in terms of historical change (intermediate stages between growth-oriented regimes and degrowth), geography (advanced-industrial OECD vs agrarian Global South) and scale (particular and local vs universal and global). In our reading of degrowth scholarship, there is a reticence among scholars and activists to compromise on anything less than ‘pure’ ideal type of degrowth. We surmise that this position is informed by a well-founded fear that any compromise leading to a watered-down version of degrowth-lite risks co-optation and appropriation via corporate responsibility schemes. Indeed, if degrowth simply means tinkering around the edges, then it is not far-fetched to imagine Exxon Mobile or Chevron launching a degrowth campaign. We are not sanguine about the very real risks of co-optation, yet we believe that the actual choice in most instances is not between ‘pure’ degrowth and degrowth-lite. Instead, many countries in subordinate positions in the global economy are currently devising plans to link resource frontiers with distant centres of global production via large-scale infrastructure networks in renewed attempts to integrate with global value chains. This regime of infrastructure-led development is typically a national development strategy based on fostering economic growth through the enhancement of connectivity (Schindler and Kanai, 2021), but it tends to lack an urban vision (Kanai and Schindler, 2022). Some existing cities are bypassed, others are burdened by the roles ascribed to them as logistical conduits for material throughput, and urbanisation on frontiers of resource extraction often lacks the most rudimentary institutions to facilitate wellbeing or social reproduction (Arboleda, 2020a, 2020b; Kanai and Schindler, 2019; Zeiderman, 2016). In other words, the actual choice in many cases is an

urban politics of subordinate degrowth geared towards adapting to decline by maintaining lifeworlds worth reproducing, or implementing a national development strategy that seeks to reverse decline through infrastructure-led development.

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Note

1. Here he meant rapid industrial growth that resulted from Detroit’s specialisation in the automotive sector.

References

- Akers J and Seymour E (2018) Instrumental exploitation: Predatory property relations at city’s end. *Geoforum* 91: 127–140.
- Akers JM (2013) Making markets: Think tank legislation and private property in Detroit. *Urban Geography* 34(8): 1070–1095.
- Arboleda M (2020a) *Planetary Mine: Territories of Extraction Under Late Capitalism*. New York, NY: Verso.
- Arboleda M (2020b) From spaces to *circuits of extraction*: Value in process and the mine/city

- nexus. *Capitalism Nature Socialism* 31(3): 114–133.
- Audirac I, Cunningham E, Fol S, et al. (2012) Declining suburbs in Europe and Latin America. *International Journal of Urban and Regional Research* 36(2): 213–414.
- Béal V, Fol S, Miot Y, et al. (2019) Varieties of right-sizing strategies: Comparing degrowth coalitions in French shrinking cities. *Urban Geography* 40(2): 192–214.
- Bluestone B and Harrison B (1980) *Capital and Communities: The Causes and Consequences of Private Disinvestment*. Washington, DC: The Progressive Alliance.
- Boffey D (2020) Amsterdam to embrace ‘doughnut’ model to mend post-coronavirus economy. *The Guardian*, 8 April. Available at: <https://www.theguardian.com/world/2020/apr/08/amsterdam-doughnut-model-mend-post-coronavirus-economy> (accessed 17 September 2021).
- Bombal IG and Luzzi M (2006) Middle-class use of barter clubs: A real alternative or just survival? In: Epstein E and Pion-Berlin D (eds) *Broken Promises? The Argentine Crisis and Argentine Democracy*. Plymouth: Lexington Books, pp.141–160.
- Bonizzi B, Kaltenbrunner A and Powell J (2015) Subordinate financialization in emerging capitalist economies. In: Mader P, Mertens D and van der Zwan N (eds) *Routledge International Handbook of Financialization*. London: Routledge, pp.177–187.
- Bortz PG and Kaltenbrunner A (2018) The international dimension of financialization in developing and emerging economies. *Development and Change* 49(2): 375–393.
- Büdenbender M and Aalbers MB (2019) How subordinate financialization shapes urban development: The rise and fall of Warsaw’s Służewiec Business District. *International Journal of Urban and Regional Research* 43(4): 666–684.
- Choi C (2020) Subordinate financialization and financial subsumption in South Korea. *Regional Studies* 54(2): 209–218.
- Clare N, Habermehl V and Mason-Deese L (2018) Territories in contestation: Relational power in Latin America. *Territory Politics Governance* 6(3): 302–321.
- Clement D and Kanai M (2015) The Detroit Future City: How pervasive neoliberal urbanism exacerbates racialized spatial injustice. *American Behavioral Scientist* 59(3): 369–385.
- Coe NM, Hess M, Yeung HWC, et al. (2004) ‘Globalizing’ regional development: A global production networks perspective. *Transactions (Institute of British Geographers)* 29(4): 468–484.
- Cohen MA (2012) *Argentina’s Economic Growth and Recovery: The Economy in a Time of Default*. New York, NY: Routledge.
- Conde RC (2009) *The Political Economy of Argentina in the Twentieth Century*. Cambridge: Cambridge University Press.
- Coppola A (2019) Projects of becoming in a right-sizing shrinking city. *Urban Geography* 40(2): 237–256.
- Cosme I, Santos R and O’Neill DW (2017) Assessing the degrowth discourse: A review and analysis of academic degrowth policy proposals. *Journal of Cleaner Production* 149: 321–334.
- Demaria F, Kallis G and Bakker K (2019) Geographies of degrowth: Nowtopias, resurgences and the decolonization of imaginaries and places. *Environment and Planning E* 2(3): 431–450.
- Demaria F, Schneider F, Sekulova F, et al. (2013) What is degrowth?: From an activist slogan to a social movement. *Environmental Values* 22: 191–215.
- Epstein E (2006) The Piquetero movement in greater Buenos Aires: Political protests by the unemployed poor during the crisis. In: Epstein E and Pion-Berlin D (eds) *Broken Promises? The Argentine Crisis and Argentine Democracy*. Plymouth: Lexington Books, pp.119–139.
- Eraydin A and Özatağan G (2021) Pathways to a resilient future: A review of policy agendas and governance practices in shrinking cities. *Cities* 115: 103226.
- Escobar A (2015) Degrowth, postdevelopment, and transitions: A preliminary conversation. *Sustainability Science* 10: 451–462.
- Florentin D (2011) The “perforated city:” Leipzig’s model of urban shrinkage management. *Berkeley Planning Journal* 23(1): 83–101.
- Gago V (2017) *Neoliberalism From Below: Popular Pragmatics and Baroque Economies*. Durham, NC: Duke University Press.

- Gearey M and Ravenscroft N (2019) The nowtopia of the riverbank: Elder environmental activism. *Environment and Planning E: Nature and Space* 2(3): 451–464.
- Gollin D, Jedwab R and Vollrath D (2016) Urbanization with and without industrialization. *Journal of Economic Growth* 21: 35–70.
- Hickel J (2021a) The anti-colonial politics of degrowth. *Political Geography* 88: 102404.
- Hickel J (2021b) What does degrowth mean?: A few points of clarification. *Globalizations* 18(7): 1105–1111.
- Hickel J and Kallis G (2020) Is green growth possible? *New Political Economy* 25(4): 469–486.
- High SC and Lewis DW (2007) *Corporate Wasteland: The Landscape and Memory of Deindustrialization*. Ithaca, NY: Cornell University Press.
- Hospers GJ (2014) Policy responses to urban shrinkage: From growth thinking to civic engagement. *European Planning Studies* 22(7): 1507–1523.
- Intergovernmental Panel on Climate Change (2022) *Climate change 2022: Impacts, adaptation, and vulnerability*. Contribution of working group II to the sixth assessment report of the intergovernmental panel on climate change. Available at: https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf (accessed 14 October 2022).
- Jenkins R (2015) Is Chinese competition causing deindustrialization in Brazil? *Latin American Perspectives* 42(6): 42–63.
- Jepson N (2020) *In China's Wake: How the Commodity Boom Transformed Development Strategies in the Global South*. New York, NY: Columbia University Press.
- Kallis G (2021) Limits, ecomodernism and degrowth. *Political Geography* 87: 102367.
- Kallis G, Kerschner C and Martinez-Alier J (2012) The economics of degrowth. *Ecological Economics* 84: 172–180.
- Kallis G, Kostakis V, Lange S, et al. (2018) Research on degrowth. *Annual Review of Environment and Resources* 43: 291–316.
- Kallis G, Varvarousis A and Petridis P (2022) Southern thought, islandness and real-existing degrowth in the Mediterranean. *World Development* 157: 105957.
- Kanai JM (2010) The politics of inequality in globalizing cities: how the middle classes matter in the governing of Buenos Aires. *Environment and Planning A* 42(8): 1887–1901.
- Kanai JM (2011) Barrio resurgence in Buenos Aires: Local autonomy claims amid state-sponsored transnationalism. *Political Geography* 30(4): 225–235.
- Kanai JM and Schindler S (2019) Peri-urban promises of connectivity: Linking project-led polycentrism to the infrastructure scramble. *Environment and Planning A* 51(2): 302–322.
- Kanai JM and Schindler S (2022) Infrastructure-led development and the peri-urban question: Furthering crossover comparisons. *Urban Studies* 59(8): 1597–1617.
- Kerschner C, Wächter P, Nierling L, et al. (2018) Degrowth and technology: Towards feasible, viable, appropriate and convivial imaginaries. *Journal of Cleaner Production* 197: 1619–1636.
- Keyßer LT and Lenzen M (2021) 1.5 °C degrowth scenarios suggest the need for new mitigation pathways. *Nature Communications* 12: 2676.
- Kothari A, Salleh A, Escobar A, et al. (2019) *Pluriverse: A Post-Development Dictionary*. New York, NY: Columbia University Press.
- Krähmer K (2022) Degrowth and the city: Multiscalar strategies for the socio-ecological transformation of space and place. *City* 26(1-2): 316–345.
- Kulfas M (2018) Reestructuración manufacturera y política industrial en la Argentina en los comienzos del siglo XXI. Los límites del modelo industrial abierto y flexible. Working paper Universidad de San Martín – Programa de investigaciones Argentina en el Largo Plazo. Available at: http://www.unsam.edu.ar/escuelas/economia/palp/DT_2.pdf (accessed 14 October 2022).
- Lapavistas C (2013) The financialization of capitalism: ‘Profiting without producing’. *City* 17(6): 792–805.
- March H (2018) The smart city and other ICT-led techno-imaginaries: Any room for dialogue with degrowth? *Journal of Cleaner Production* 197: 1694–1703.
- Martinez-Fernandez C, Audirac I, Fol S, et al. (2012) Shrinking cities: Urban challenges of globalization. *International Journal of Urban and Regional Research* 36(2): 213–225.

- Mastini R, Kallis G and Hickel J (2021) A Green New Deal without growth? *Ecological Economics* 179: 106832.
- Nirmal P and Rocheleau D (2019) Decolonizing degrowth in the post-development convergence: Questions, experiences, and proposals from two indigenous territories. *Environment and Planning E: Nature and Space* 2(3): 465–492.
- Özatağan G and Eraydin A (2021) Emerging policy responses in shrinking cities: Shifting policy agendas to align with growth machine politics. *Environment and Planning A* 53(5): 1096–1114.
- Pike A (2022) Coping with deindustrialization in the global North and South. *International Journal of Urban Sciences* 26(1): 1–22.
- Pike A and Pollard J (2010) Economic geographies of financialization. *Economic Geography* 86(1): 29–51.
- Rhodes J and Russo J (2013) Shrinking ‘Smart’?: Urban redevelopment and shrinkage in Youngstown, Ohio. *Urban Geography* 34(3): 305–326.
- Rodrik D (2016) Premature deindustrialization. *Journal of Economic Growth* 21(1): 1–33.
- Safrański S (2020) Geographies of algorithmic violence: Redlining the smart city. *International Journal of Urban and Regional Research* 44(2): 200–218.
- Santarcángelo J, Wydler A and Padín JM (2019) Política económica y desempeño industrial en la Argentina durante el gobierno de la Alianza Cambiemos. Balance y perspectivas. *Revista de Ciencias Sociales, Segunda Época* 10(35): 171–188.
- Schindler S (2016) Detroit after bankruptcy: A case of degrowth machine politics. *Urban Studies* 53(4): 818–836.
- Schindler S, Gillespie T, Banks N, et al. (2020) Deindustrialization in cities of the Global South. *Area Development and Policy* 5(3): 283–304.
- Schindler S and Kanai JM (2021) Getting the territory right: Infrastructure-led development and the re-emergence of spatial planning strategies. *Regional Studies* 55(1): 40–51.
- Schorr M (2012) Argentina: ¿nuevo modelo o «viento de cola»? Una caracterización en clave comparativa. *Nueva Sociedad* 237: 114–127.
- Smith TSJ, Baranowski M and Schmid B (2021) Intentional degrowth and its unintended consequences: Uneven journeys towards post-growth transformations. *Ecological Economics* 190: 107215.
- Svampa M (2005) *La Sociedad Excluyente: La Argentina Bajo El Signo Del Neoliberalismo*. Buenos Aires: Taurus.
- Svampa M and Corral D (2006) Political mobilization in neighborhood assemblies: The cases of Villa Crespo and Palermo. In: Epstein E and Pion-Berlin D (eds) *Broken Promises? The Argentine Crisis and Argentine Democracy*. Plymouth: Lexington Books, pp.119–139.
- Tainter JA (1988) *The Collapse of Complex Societies*. Cambridge: Cambridge University Press.
- Taylor I (2016) Dependency redux: Why Africa is not rising. *Review of African Political Economy* 43(147): 8–25.
- Trainer T (2021) What does degrowth mean? Some comments on Jason Hickel’s ‘A few points of clarification’. *Globalizations* 18(7): 1112–1116.
- Waisman CH (1987) *Reversal of Development in Argentina: Postwar Counterrevolutionary Policies and Their Structural Consequences*. Princeton, NJ: Princeton University Press.
- Welsby D, Price J, Pye S, et al. (2021) Unextractable fossil fuels in a 1.5 °C world. *Nature* 597: 230–234.
- Wilson D and Heil M (2022) Decline machines and economic development: Rust belt cities and Flint, Michigan. *Urban Geography* 43(2): 163–183.
- Zanotti GG, Schorr M and Cassini L (2021) Nuevo ciclo neoliberal y desindustrialización en la Argentina: El gobierno de Cambiemos (2015–2019). *Cuadernos de Economía Crítica* 7(13): 65–96.
- Zeiderman A (2016) Submergence: Precarious politics in Colombia’s future port-city. *Antipode* 48(3): 809–831.