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Seizing the Means of Circulation: Choke Points and Logistical Resistance in Coco Solo, Panama

Martin Danyluk

School of Geography, University of Nottingham, Nottingham, UK;
martin.danyluk@nottingham.ac.uk

Abstract: Recent studies of logistics have embraced the "choke point" thesis: the notion that a strategically positioned group of workers or insurgents can exercise outsize power by disrupting the circulation of goods through the supply chain. This article examines this proposition through the case of Coco Solo, Panama, an informal community situated at the epicentre of Panama's transit economy but persistently excluded from its benefits. Between 2001 and 2014, as part of a protracted struggle over housing, Coco Solo residents repeatedly blockaded key ports and logistics facilities. Despite their location at a critical node in global capitalist commodity circuits, the community's actions met with limited success. I draw on the case to refine existing theorisations of logistical resistance, emphasising the contingent factors that influence the effectiveness of such tactics, the diverse contexts in which they are mobilised, and the value of going beyond workerist and insurrectionist accounts of supply chain disruption.

Resumen: Estudios recientes sobre logística han adoptado la tesis del "punto de estrangulamiento": la noción de que un grupo estratégicamente posicionado de trabajadores o insurgentes puede ejercer un poder desmesurado al interrumpir la circulación de bienes a través de la cadena de suministro. Este artículo analiza esa propuesta desde el caso de Coco Solo, Panamá, una comunidad informal situada en el epicentro de la economía de tránsito panameña, pero continuamente excluida de sus beneficios. Entre 2001 y 2014, como parte de una prolongada lucha por la vivienda, residentes de Coco Solo bloquearon repetidamente puertos e instalaciones claves para la logística. A pesar de que sus protestas se realizaron en un espacio crítico para los circuitos capitalistas globales de mercancías, las acciones de la comunidad tuvieron un éxito limitado. Utilizo el caso de Coco Solo para enriquecer la discusión teórica vigente sobre la resistencia logística, destacando los factores contingentes que influyen su efectividad, los diversos contextos en los que se moviliza y el valor de ir más allá de interpretaciones obreristas e insurreccionistas al discutir la interrupción de la cadena de suministro.

Keywords: logistics, choke points, blockades, political resistance, Panama

Introduction

This article contributes to a growing literature on disruption and resistance in capitalist logistics systems. As the accumulation of capital has increasingly come to depend on the smooth and rapid circulation of goods through global supply chains, commentators have suggested that we are witnessing a corresponding change in the vocabulary of protest, at least in the overdeveloped world, with the blockade displacing the strike as the preeminent tactic of class struggle (Bernes 2013; Degenerate Communism 2014). In contrast to the laudatory tone of

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some analyses of blockades and other "circulation struggles" (Clover 2016:30), however, my intention here is to take seriously the tensions and ambiguities that often haunt such acts of logistical sabotage. Specifically, the article interrogates what I call the "choke point" thesis: the notion that a strategically positioned collective of workers or insurgents can exercise outsize political power by interrupting the circulation of commodities through a critical link, or choke point, in the supply chain. In recent years this idea has been widely and sometimes enthusiastically taken up in both academic and activist writing on logistics (e.g. Alimahomed-Wilson and Ness 2018a; Bernes 2013; Bonacich and Wilson 2008; Chua et al. 2018; Invisible Committee 2009, 2015; Moody 2017).

The choke point thesis is of special interest to geographers insofar as its central premise is fundamentally spatial (or, more precisely, *topological*): a key factor influencing the effectiveness of blockades and similar tactics, it is suggested, is a high-traffic "choke point" location within the supply chain, where commodity flows are particularly vulnerable to disruption. Yet a narrow focus on the leverage available to protesters by seizing a strategic position can obscure a host of other factors that influence the outcomes of such actions. I make a case here for careful analysis of these contingent conditions, with the aim of refining existing theorisations of logistical resistance and pointing out more advantageous pathways for struggle. My contention is not, emphatically, that blockades are ineffective. Rather, I seek to better understand the conditions that favour their success, the diverse contexts in which they are mobilised, and the value of going beyond workerist and insurrectionist accounts of supply chain disruption.

To this end, I examine the case of Coco Solo, Panama, an informal community that was located near the Atlantic entrance of the Panama Canal and demolished in 2016. The Isthmus of Panama, and particularly the narrow "transit zone" that encompasses the canal and a cluster of related logistics infrastructure, is an exemplary choke point, a critical node in global commodity chains. As such, it is a site where the use of blockade tactics by protesters would be expected to translate into significant social power. The people of Coco Solo, situated at the epicentre of this corridor, consciously exploited their strategic position to advance long-standing struggles over housing. Between 2001 and 2014, in response to years of government neglect, deteriorating living conditions, and uncertainty around their looming relocation, residents repeatedly blocked access to key shipping ports and logistics facilities, demanding decent and secure housing from the state. Despite conforming closely to the idealised model of resistance embodied in the choke point thesis, the community's actions had ambiguous results. 13 years of roadblocks yielded no meaningful improvements to residents' living conditions, and their relocation to permanent housing, when it finally occurred, was motivated more by commercial pressure than by community need. As the case demonstrates, the effectiveness of logistical resistance cannot be assumed in isolation from detailed empirical knowledge of conditions on the ground. The analysis thus offers an important corrective to sweeping prescriptions for anti-infrastructural sabotage: on the blockade, as with all forms of direct action, contingencies are decisive. For the literature on counterlogistics, Coco Solo also serves as a reminder that supply chain disruption is not a tactic reserved for logistics workers and

revolutionary saboteurs; it is employed, often under other names, by diverse actors in popular struggles around the world.

The article draws on seven months of fieldwork conducted between October 2012 and February 2014. After making initial contact with staff at Cambio Creativo, a grassroots educational organisation based in Coco Solo, I visited the community several days a week, conducting participant observation while volunteering in Cambio Creativo's library and education centre. At the invitation of community leaders, I continued to serve on the organisation's international board of directors until 2016. My access to Coco Solo, my relationships with residents, and my interpretations of events were conditioned both by my social position as a white researcher from a wealthy country and by my imperfect command of Spanish. However, the time I spent in the community and my sustained involvement with Cambio Creativo afforded many opportunities for informal discussions with residents, community leaders, and others with detailed local knowledge, allowing me to bring my own partial understandings into dialogue with differently positioned sources. The article also draws on interviews with former residents, environmental organisers, and shipping and logistics industry representatives, as well as participant observation at business conferences and trade fairs. These primary data are supplemented by news media, industry reports, and other secondary sources.

The first section of the article presents the choke point thesis in more detail, situating it within a broader literature on logistical power and logistical resistance. The second section shows how Panama's strategic geographic position and economic reliance on shipping and logistics make the country a paradigmatic choke point in global supply chains—and therefore an ideal target for disruption. The third section turns to Coco Solo, detailing the community's persistent neglect by the state and residents' repeated use of roadblocks to protest their housing conditions. The final section draws on the Coco Solo case to build toward a more nuanced understanding of logistical resistance, calling for situated analyses of supply chain disruptions and emphasising the diversity of actors and movements that employ them.

Logistical Power, Logistical Resistance, and the Choke Point Thesis

What I have called the choke point thesis has recently gained currency within a growing literature on power and resistance in capitalist logistics systems. As the logistics revolution has reshaped the operations of "supply chain capitalism" (Tsing 2009:148), scholars have made a case for theorising logistics not simply as an emergent industry or business science but as a distinctive mode of power (Chua et al. 2018; Cowen 2014; Neilson 2012; Sebregondi 2018). Whereas state power in its traditional form is based on control over the making and enforcement of laws and regulations, and exercised over spatially demarcated territories, logistical power is rooted in control over *circulation*—flows of goods, materials, energy, bodies, and information—and exercised through infrastructural networks. Those who manage the means of circulation wield power in part through their ability to control the distribution of material resources: to speed up, redirect, or impede the movement of

commodities. As techniques of logistical governance have proliferated, from special economic zones and externalised borders to predictive marketing and automated warehouses, scholars have called attention to "alternative geographies of power" organised not around fixed territories but around a mutating web of "lines and junctions, frictions and flows" (Schouten 2019:927).

The accumulation of logistical power in the hands of capital and the state has been accompanied by an intensification of struggles to wrest it away. The question of "logistical resistance" (Folkers and Stenmanns 2019:199) or "counterlogistics" (Bernes 2013) is now firmly on the agenda of social movements. Trade unions, anticapitalist organisations, and Indigenous land defenders regularly employ blockades, occupations, and sabotages to protest, and physically interrupt, the violence of capitalist and colonial exploitation and dispossession (Anonymous 2016; Blomley 1996; Pasternak and Dafnos 2018). In Latin America, the roadblock (*bloqueo* or *piquete*) is perhaps the most widespread tactic in the repertoire of direct action, used both to demand state redress of local grievances and as part of wider antistate movements (Sitrin 2012; Svampa and Stefanoni 2007; Zibechi 2012). For some theorists, the growing prominence of such "antagonism along the conduits of circulation" (Toscano 2014) indexes the increasing centrality of logistics to the accumulation of capital (Bernes 2013; Clover 2016; Moody 2017). With the global diffusion of manufacturing and the lengthening of supply chains, the reproduction of capitalism depends more than ever on carefully orchestrated movements of goods, components, and raw materials across long distances (Danyluk 2018). Accordingly, struggles are increasingly waged along channels of transportation—on highways and rail lines, in warehouses and airports.

A focus on logistical resistance calls into question the assumption within traditional Marxist theory that class struggle must begin at the site of production, classically conceived as the industrial factory. Instead, it reveals the sphere of circulation to be an important site of struggle in its own right. This idea takes inspiration from autonomist feminists of the 1960s and 1970s, who challenged the theoretical and strategic primacy accorded to production in conventional Marxist accounts (Degenerate Communism 2014). Drawing on the concept of the "social factory", they argued that those positioned outside the traditional proletariat—namely, women performing the work of social reproduction—play a vital role in the production of surplus value and are therefore capable of halting the operation of the system by withdrawing their reproductive labour (Dalla Costa and James 1972; Fortunati 1995). Those positioned in the sphere of circulation, it is argued today, have similar powers of disruption:

> Production can be halted *from beyond*, by proletarians who are not productive labourers, through an interruption of the circulation upon which production depends … If the commodities (raw materials, half-finished goods, finished goods) and bodies which capital needs don't arrive at the factory, the warehouse, or the retail outlet, then all labour and all production of value stops. (Research and Destroy 2014:184)

Pursuing this idea, Clover (2016:30) traces a shift in the overdeveloped world since the 1960s from labour struggles, waged by workers in the sphere of production, to what he calls "circulation struggles", waged by the dispossessed in the

spaces of circulation. While Clover's use of "circulation" is not without conceptual difficulties,[1] it nonetheless underscores a critical insight of the literature on logistical resistance: protesters who impede the movement of commodities through transportation networks—just like striking factory workers who halt the assembly line—wield a potentially formidable weapon.

So blockades are protests, but they are more than protests. Like strikes, they intervene materially in the taking of profits, applying real pressure on the capitalist class. Unlike strikes, they are not typically direct challenges to capital itself but mediated attacks on the capitalist state, which is critical to the deployment and securitisation of logistics (Toscano 2014). Often what is in dispute is the act of circulation itself, as in the case of Indigenous land defenders seeking to prevent movement into their traditional territories (Blomley 1996). Beyond merely attracting media and government attention, the immobilisation of commodity flows offers a source of leverage that can compel officials to negotiate on terms they might not otherwise entertain.

It is within such discussions of logistical power and resistance that we encounter the choke point thesis. In one sense, there is nothing particularly new about the act of seizing critical transport links to challenge injustice and oppression. The naval blockade, for example, has long been employed as a tool not only of both economic warfare but also of political protest (Linebaugh and Rediker 2000; Sekula 2002). Similarly, Mitchell (2011) describes how, in the late 19th century, coal workers concentrated around key nodes and terminals used strikes and acts of sabotage to cut off energy supplies to critical industrial functions. These workers amassed considerable power on the premise that "a relatively minor malfunction, mistiming or interruption, introduced at the right place and moment, could now have widespread effects" (Mitchell 2011:22–23). Despite these continuities, the logistics revolution that began in the 1960s has plainly created new vulnerabilities for capital (Bonacich and Wilson 2008; Cowen 2014; Moody 2017). Beyond the essential role of transportation in the operations of contemporary capitalism, two features of today's supply chains make them particularly susceptible to disruption. One is the growing importance of time as a basis of competition. Just-in-time production, "lean" inventories, cross-docking, next-day and same-day delivery—all these developments mean there is now little margin for error or delay. A blockage at a single point can have far-reaching effects, bringing multiple upstream and downstream operations to a halt (Herod 2003). A second vulnerability stems from the concentration of commodity flows through a handful of large facilities—choke points—that constitute natural targets. The Ports of Los Angeles and Long Beach, for example, together handle about 40% of all containerised imports into the United States; a 2006 study estimated that a week-long interruption at the twin ports would cost the US economy between $65 million and $150 million a day (CBO 2006).

The most extensive engagements with the idea of choke point disruption are found in two main strands of thought. A first focuses on logistics labour and is informed by theories of worker power. This literature argues that for workers situated at pressure points along the supply chain, the ability to disrupt the flow of commodity capital can be a source of significant leverage. One recent book on

this subject, *Choke Points: Logistics Workers Disrupting the Global Supply Chain*, offers a succinct statement of the choke point thesis as it applies to labour:

> Logistics workers are uniquely positioned in the global capitalist system. Their places of work are also in the world's choke points—critical nodes in the global capitalist supply chain—which, if organized by workers and labor, provide a key challenge to capitalism's reliance on the "smooth circulation" of capital. In other words, logistics remains a crucial site for increasing working-class power today. (Alimahomed-Wilson and Ness 2018b:2)

In this analysis, logistics workers can be understood to exercise a high level of what Erik Olin Wright (2000:962) called "structural power": power that results from their central position within the economic system. This is contrasted with "associational power", which results from workers' collective organisation into unions, political parties, or other forms of association (see also Fox-Hodess 2019; Olney 2018). Of course, structural and associational power are not independent: logistics workers engaged in supply chain disruption must build organisations and alliances if they are to realise the potential afforded by their strategic position.

A second version of the choke point thesis comes from the so-called communisation current, a heterogeneous assortment of activists and theorists informed by insurrectionary anarchism, ultraleftism, and post-autonomism. Like the worker-power school, writers in this tendency recognise the vulnerabilities of logistics systems and have paid special attention to sites with high levels of throughput. Degenerate Communism (2014) calls for protesters to occupy "high-traffic nodes" (seaports, rail yards) and "high-traffic lines" (railways, truck routes), where even a small group of saboteurs can disrupt the movement of large volumes of cargo. Yet the emphasis on identifying and seizing strategic sites of intervention at times shades into a kind of reification in which social power is attributed to the choke point itself. The Invisible Committee (2015:82, 83), perhaps the strongest exponent of the choke point thesis, claims that "power *no longer resides in the institutions*" but "*resides in the infrastructures of this world*". This line of reasoning has come to inform sweeping calls for infrastructural sabotage:

> Jam everything—this will be the first reflex of all those who rebel against the present order. (Invisible Committee 2009:125)

> A few tactical interventions—at major ports, for instance—could bring an entire economy to its knees. (Oakland Commune 2012:31)

> Power is logistic. Block everything! (Invisible Committee 2015:81)

> We call on all warriors and revolutionaries around the world to immediately orient themselves around blockading infrastructure. (Anonymous 2016)

For Toscano (2011), such exhortations threaten "to make something of a fetish out of rupture". Missing from the "spontaneous philosophy of interruption" espoused by the communisation theorists, he suggests, is an account of how improvisatory acts of insurrection might build the collective counterpower necessary to sustain more enduring noncapitalist social relations.

While such adventurism might be justified in polemical writing, even more measured accounts of logistical disruption tend to overlook important limitations of the blockade as a tactic. A critical reappraisal of the choke point thesis, as I seek to develop in what follows, aims to combine an acknowledgement of these constraints with an appreciation of the multiple factors that shape blockaders' social power.

Panama: "Hub of the Americas"

As the shortest land crossing between the Pacific and Atlantic Oceans, the Isthmus of Panama has long been a strategic route for transportation and trade. Panamanians have often claimed that the country's most valuable natural resource is its geographic position (Gandásegui 2008). Stanley Heckadon-Moreno, a well-known Panamanian conservationist, summarised this bit of national mythology in an interview: "We don't have oil. We don't have gold. We have a strategic position: the narrowest point between the two oceans." The conditions for the exploitation of that resource were established with the colonisation of the isthmus by Spain in the early 16th century and its subsequent incorporation into the emerging capitalist world system. In this context of imperial and mercantile expansion, Panama quickly became an important link for global commerce, serving as an overland transport route for colonial merchants moving precious metals from Peru to Madrid.

Over 500 years, successive technological advances increased both the speed and the volume of commodity flows across the isthmus. Early interoceanic cargoes were carried by trains of mules handled by enslaved people on a land journey that took four days (Maurer and Yu 2011). In 1855, the colonial roads were superseded by the Panama Railroad, built by a New York-based company to carry American gold miners bound for California. This was followed in 1914 by the completion of the Panama Canal, constructed and operated by the US government as a condition of American support for Panamanian independence from Colombia. In important ways, then, the Panamanian nation-state owes its very existence to the canal. The new Central American republic joined a line of other "logistical states" (Schouten 2019:932) or what Scott (2009:50) calls "toll states"—polities organised around "strategic choke points on land and water trade routes, the control of which might confer decisive economic and political advantages" (Scott 2009:49).

For international manufacturers and traders, the Panama Canal effectively serves as a giant shortcut, reducing the time and cost of moving commodities and thereby hastening the turnover of their capital. The transport orientation of Panama's political economy has generated a distinctive pattern of uneven development within the country, labelled "transitism" by Panamanian scholars (Castillero Calvo 1973; Porras 2008:54).[2] Transitism refers to a mode of political, economic, and territorial organisation centred on the control of a single transportation route and the subordination of other regions of the country to the needs of that route. For much of the 20th century, the sociospatial disparities between Panama's urbanised transit corridor and its rural hinterland were exacerbated by the presence of

the US-controlled Panama Canal Zone, an American exclave whose administrators ensured that the economic rents generated by the canal and related activities flowed almost entirely to the United States (Gorostiaga 1974).

In the mid-20th century, Panama's government began actively promoting a cluster of complementary services in an effort to turn the presence of the canal, and the country's geographic position, to its own advantage. Especially since the reversion of the canal and related assets to the Panamanian state, a process completed in 1999, those services have become crucial to the country's success in logistics, now the backbone of its national development strategy. The Colón Free Zone, located near the Atlantic end of the canal, is today the largest free trade zone in the Western Hemisphere, moving some $20 billion in trade a year (INEC 2018). Panama boasts the world's largest ship registry and an extensive network of maritime insurance and maritime law firms (Ardito Barletta 2011). The five container ports that flank the canal rank among the busiest in Latin America, together handling some 7,000,000 twenty-foot equivalent units (TEU) a year. A railway and two truck highways complement the canal by shuttling cargo between ports on the two coasts. Panama City's international airport, billed as the "Hub of the Americas", is used as an air cargo centre by DHL, UPS, and FedEx. The canal itself recently underwent a $5.25 billion expansion intended to ensure its continued relevance in an age of increasingly massive ships. Business security specialist Giomar González, speaking at the 2013 Panama Free Zones Expo Forum, stressed the importance of these logistics activities to national prosperity: "Our whole economy has to be oriented to the service and the flow of goods movement. That's the motto." Former president Nicolás Ardito Barletta, in an interview, offered a similar assessment: "This is the engine of growth of the country."

Within global commodity chains, Panama functions primarily as an intermediary of transnational flows (Sigler 2013). Its shipping and logistics industries are driven overwhelmingly by transshipment (ship-to-ship transfer) rather than imports or exports: fully 80% of the cargo unloaded at the country's ports is loaded onto another vessel for onward delivery, often at a port on the other side of the isthmus. This means that timely and reliable ground transportation, via the railroad and truck routes, is critical to Panama's transshipment business. More generally, the growth of logistics and related services has reinforced Panama's transitist development pattern and made the country highly dependent on freight traffic moving through the canal and the ports. Manduley (2009:18) argues that the hypertrophy of the service sector, which accounts for more than 80% of GDP, has led to "an extreme opening and vulnerability of the economy". Indeed, for as long as Panama has been a crossroads of trade, its economy has been rocked by exogenous shocks, reflected in cyclical periods of growth and crisis (Maurer and Yu 2011; Porras 2008).

Today, in business and government circles, an awareness of that volatile history has fuelled anxieties about Panama's logistics performance in the face of mounting competition from other countries. Much of the impetus for the recent canal expansion came from a fear of losing cargo traffic to alternative routes, particularly the Suez Canal and the North American intermodal system, which have

become attractive options for shippers moving goods between Asia and the eastern United States. That sense of vulnerability filters down to day-to-day logistics operations, where security, efficiency, and reliability are regarded as vital to the well-being of the sector and, by extension, the economy as a whole. These concerns were repeatedly flagged by speakers at the 2013 Panama Logistics Expo and Panama Free Zones Expo Forum:

> We have to improve efficiency and punctuality. As the gringos say, time is money. (Surse Pierpoint, general manager, Colon Import & Export)

> We have to protect ourselves … We have to look after the security of the country. We have to look after the security of business … The logistics chain, we've been saying for a long time, is as strong as its weakest link. (Giomar González, director, BASC Panama)

> One of the things that we need in Panama is better mitigation of disruption. We had a couple of disruptions in the last year or so, and they caused huge problems … There needs to be fewer disruptions. Whatever causes disruptions needs to be done away with. (Don Ratliff, executive director, Georgia Tech Panama Supply Chain and Logistics Institute)

Similarly, the government's national logistics plan identifies delays caused by "strikes, stoppages, and barricades" (Martínez Rivas 2014:78) as a significant threat to freight movement. These statements reflect an uneasy reality: Panama's unique geographic position also renders it uniquely vulnerable. The isthmus's strategic importance to world commerce, along with the extreme reliance of its economy on international trade and logistics, makes it a paradigmatic choke point in global commodity chains. Theories of logistical resistance would therefore suggest that Panama is ripe for sabotage; those engaged in blockades on the isthmus should wield considerable power by virtue of their ability to disrupt a key node in global transportation networks. I now turn to the case of Coco Solo to examine how this expectation is complicated by conditions on the ground.

On the Blockade

Coco Solo was a community of about 300 households living in an abandoned US naval base near the Atlantic entrance to the Panama Canal (see Figure 1). Established in 1918, the naval station later served as a residential townsite for civilian employees of the US-run Panama Canal Company and its successor, the joint Panamanian–US Panama Canal Commission. Beginning in the 1980s, Coco Solo was gradually vacated as lands and buildings in the former Canal Zone were transferred to Panamanian control. Around the same time, the nearby city of Colón was plunged into a severe housing and employment crisis, provoked by the withdrawal of American troops and workers and US sanctions against the military dictatorship of Manuel Noriega. In the mid-1990s, dozens of households in Colón's historic centre found themselves homeless after their apartments, neglected or abandoned altogether by landlords, were destroyed in fires or building collapses.[3] The Ministry of Housing relocated many of these families to the

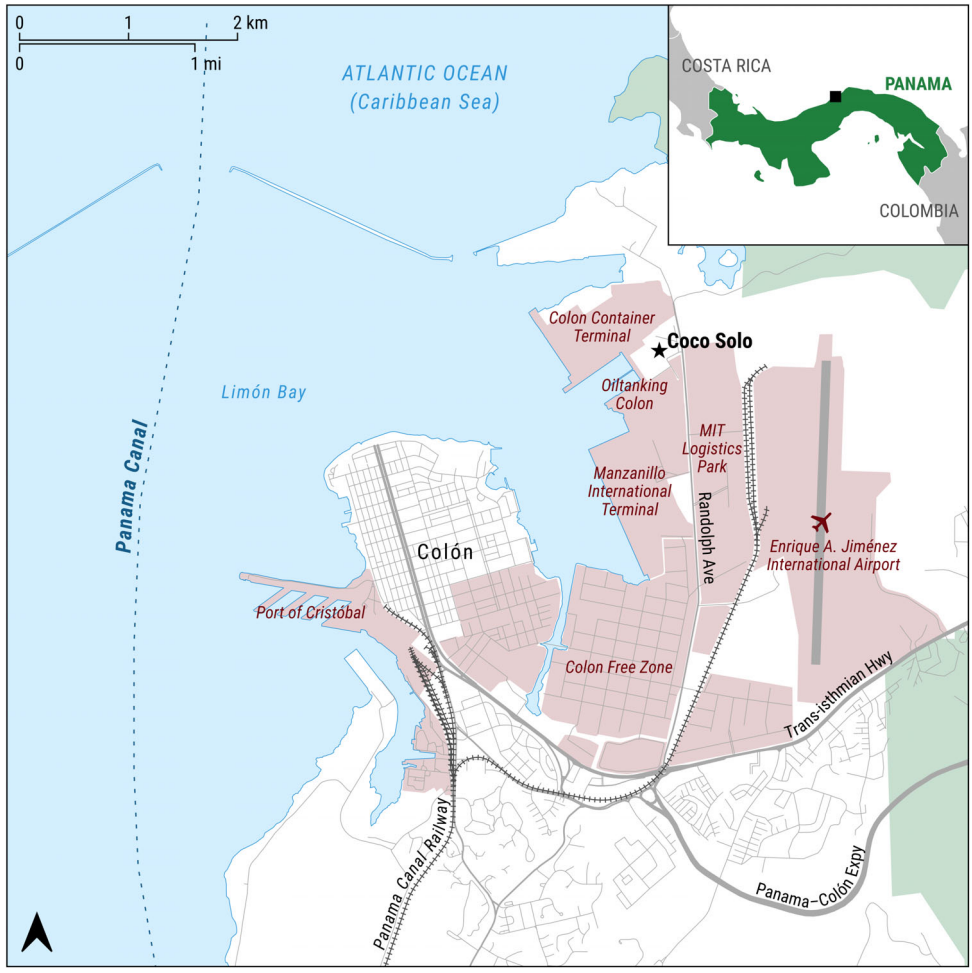

Figure 1: Coco Solo and nearby shipping and logistics facilities, early 2016 (map by author; data from Natural Earth and OpenStreetMap) [Color figure can be viewed at wileyonlinelibrary.com]

old Coco Solo barracks, now controlled by the Panamanian government. The site was isolated, located four kilometres off the highway in an industrial port district, but authorities assured residents that these were temporary arrangements and they would be moved into permanent housing as soon as a suitable location was found.

Residents said that Coco Solo was initially a decent place to live. But deep-seated racism against the community's predominantly Afro-Panamanian population, in part the legacy of an extensive system of segregation imposed by US colonial administrators in the Panama Canal Zone (Greene 2009), contributed to years of neglect by the government. The Ministry of Housing failed to maintain buildings and infrastructure in Coco Solo, and living conditions deteriorated. Without formal tenancy agreements, residents found themselves unable to open phone or utility accounts. Some jury-rigged electricity from nearby power lines;

others, desperate for income, extracted copper and iron pipes from the walls. Many units lacked running water and sanitary toilets.

In January 2001, residents of Coco Solo took to the streets to protest the government's failure to address their housing situation. Housing officials had informed them that a cluster of buildings in the community would be demolished because of safety concerns, but many of the affected households had not been offered anywhere to live. In response, a dozen families staged a blockade of Randolph Avenue, the only road into the community and, crucially, the only truck access to the neighbouring Colon Container Terminal, one of Panama's busiest ports. The closure halted operations at the terminal, owned by the Taiwan-based Evergreen Group, where two ships sat waiting for cargo for two hours. The provincial governor, citing losses to the shipping industry, called on residents to reopen the street and assured them that their concerns would be heard (Panamá América 2001). It would be the first of many roadblocks deployed by the community over the next 13 years.

As the crisis in Colón drove more displaced and homeless residents to Coco Solo, the community's population grew to 250 households. The neighbourhood acquired a reputation for gangs and violence, a stigma fuelled by anti-Black racism. Buses stopped serving the area. Children were forced to hitchhike to school in heavy-duty trucks, while taxi drivers demanded more than the legal fare or refused to enter the community altogether. "Not even the police would go in", said one former resident, Rafael.[4] When the police eventually did return, they arrived by the busload, raiding homes for drugs and guns.

Meanwhile, after the decision in 2006 to enlarge the Panama Canal, government officials and business leaders worked to consolidate Colón's position as an international logistics and transshipment hub. The city's three ports pursued aggressive expansion projects, dredging shipping channels and building new piers and container yards. The Colón Free Zone saw its business triple in a decade (INEC 2018). A former military airport was reopened as an air cargo terminal and surrounded by warehouses and industrial parks. This development activity was accompanied by infrastructure projects aimed at improving connections between the various elements of Panama's logistics cluster, including the refurbishment of the railway and the construction of a new expressway between Colón and Panama City. The people of Coco Solo thus found themselves living at the heart of one of the busiest shipping and logistics hubs in Latin America. Yet they saw few benefits from that economic activity, which they experienced instead in the form of drastic changes to their environment and livelihoods. Coco Solo was hemmed in on three sides by a container port, a logistics park, and a fuel-tank farm, and residents lost their access to the beach when the neighbouring oil terminal built a concrete wall separating them from the ocean. Without consulting the community, port operators bulldozed hundreds of hectares of mangroves, used by residents for subsistence practices like harvesting crabs and scrap metal, in order to make way for new shipping piers and warehouses (McKinley and Piette 2007).[5] The filling of wetlands destroyed the area's natural drainage system, resulting in frequent flooding in the community. Armando, a father of three who lived in Coco Solo for several years, said that

his children repeatedly came home with rashes on their skin after playing in pools of stagnant water.

Such conditions are symptomatic of wider tensions between residents and industry in Colón. Foreign-owned corporations moving billions of dollars' worth of goods through the city each year—port operators, importer-exporters in the free zone, the railroad—receive generous tax breaks from the Panamanian government, meaning they contribute nothing to municipal revenues; nor do they generate significant economic opportunities for local communities. Residents of Coco Solo were "very disappointed" when new port and logistics projects failed to bring employment, Rafael said; "People thought there would be more work". Some felt that industry profits were valued more than their own lives. "They don't give a single penny to community development", said Armando; "They only think about themselves". Kurt Dillon, an architect and urban planner who has worked extensively in the area, explained that nothing had been done about a rash of train accidents near Coco Solo: "The railroad guys, I guess they felt the margin was good enough that they could afford to pay out … whatever it costs if you run someone over with a train once a year." Within the community, too, the costs of local goods-movement activity were measured in lives, including that of Chombo, a young boy from Coco Solo who was fatally crushed by a semitrailer while foraging for scrap metal in a nearby container yard.

Most of Coco Solo's inhabitants were unemployed and survived on less than a dollar a day. Residents negotiated poverty and insecurity in various, sometimes contradictory ways. Many sought informal employment delivering parcels, cleaning houses, doing construction work, or loading and unloading boxes for the same companies that had desecrated the environment around them. Some, like Armando, pursued higher education in hopes of securing upward mobility, but found their career paths blocked by racist stereotypes of Coco Solo residents as freeloaders and *maleantes* (thugs). Still others used what resources they had to provide leadership and support to those around them. Timo, a pastor who moved to Coco Solo in 2003, went on to adopt four boys from the community and co-found Cambio Creativo, the educational organisation that runs after-school study halls and cultural workshops for local children and youth.

Timo recalled coming to the neighbourhood for the first time: "What I was told with my mother when they brought us here is that we wouldn't be here more than three months." Over a decade after the first residents moved to Coco Solo, three successive governments had still not delivered on the promise to find them secure housing. Community members staged another protest in May 2007, cutting off access to the port terminal for three hours as they demanded better living conditions (CLACSO 2007). Later that year, Minister of Housing and presidential hopeful Balbina Herrera visited the neighbourhood. Rafael, who lived in Coco Solo for ten years, described Herrera's visit in terms of a recurring cycle of clientelism and lies by politicians: "She went to Coco Solo to promise them lots of things if they voted for her … She went there to hug people. But ask her if she's been back to Coco Solo since then. No."

As work began on the canal expansion project, mounting commercial interest in Coco Solo's prime waterfront location prompted Panama's central government

to make the site available for logistics uses. The 12-hectare property was the subject of a protracted dispute between Colon Container Terminal and the neighbouring fuel oil company, both of which were seeking land for expansion (Jordán and Berrocal 2006). After winning the case in 2008, the port operator paid the government $3.7 million to use the site for 20 years, plus $7.6 million for the construction of 300 new houses for Coco Solo residents (Jordán 2009). Once again, community members were not consulted about the decision to relocate them. But the government had yet to identify a location for the new housing development, and so Colon Container Terminal was forced to wait several more years before it could use the Coco Solo site. During this time, occupants were repeatedly approached by representatives of the port with offers of cash to move out sooner.

In 2008, a group of concerned Coco Solo residents contacted the Ministry of Housing to discuss plans for their relocation. Officials agreed to hold regular meetings with community representatives, who described the talks to me as a ruse. As Armando explained, residents believed the government had deliberately allowed conditions in Coco Solo to deteriorate: "Let's strangle them there. Let's corral them there so they feel they have to leave." In March 2009, residents staged another blockade. Fed up with the lack of drinking water, the accumulation of waste, and years of foot-dragging by politicians, protesters shut down the street for three hours. A spokesperson said residents felt cheated because, as the term of the current presidential administration was coming to a close, no progress had been made on the houses promised to them more than a decade earlier. A senior housing official asked them to be patient (La Prensa 2009). The extensive logistics development that had occurred around Coco Solo over the past decade meant that the impacts of this road closure were multiplied. Not only did the blockade prevent vehicle movement into and out of Colon Container Terminal; the backup of trucks along Randolph Avenue also snarled cargo traffic at a second major port (Manzanillo International Terminal) and the Colón Free Zone, as well as the newly opened rail freight terminal, logistics park, and fuel oil facility.

The community's pressure tactics finally generated some movement. In September 2009, the government of new president Ricardo Martinelli announced that it had identified a site for the community, an hour away in the district of Buena Vista, and that 300 houses would be built there by early 2010. But when no progress had been made by December, Coco Solo residents closed the road yet again, demanding a meeting with authorities. This time they held their blockade for 36 hours, until the provincial governor promised to order the housing development to proceed.

Construction eventually began on the homes in Buena Vista, but there were further setbacks. Residents were now told they would have to pay for their new houses, even though the port operator had paid for them already. When angry community members took to the street yet again, housing officials backed down, conceding that residents would be charged only for the land, not the houses themselves. Still, for those without secure employment, the monthly mortgage payments would be a significant expense. As the first families were relocated, it became apparent that the new homes were poorly constructed, with thin walls

made of plywood and foam and roofs that were prone to rusting. Armando, whose family was among the first to move, said that everyday costs like food, water, and transportation were higher in Buena Vista, and trips to work and school took longer.

Meanwhile, inspectors determined that several of the old concrete buildings in Coco Solo were on the brink of collapse. With both the port and the Ministry of Housing pressing the remaining inhabitants to leave and with construction in Buena Vista held up yet again, 35 households chose to accept an offer of rental assistance from the government and look for housing elsewhere. But at $150 a month, less than half the average rent for an apartment in Colón, the subsidy was only enough for a small unit in poor condition, typically without running water. Other families refused the aid, saying they didn't trust the government and vowing to stay in Coco Solo. Without property titles, however, they had no legal grounds on which to challenge their displacement. The different strategies divided the community, with one faction pushing for subsidised rental apartments and another clamouring to join their former neighbours in Buena Vista. In January 2012 a few dozen residents from the latter group, mainly women and children, blocked the road for eight hours. They were dispersed by riot police armed with tear gas canisters (Cortéz 2012).

In 2013, the company that had been contracted to build the houses in Buena Vista ran out of money. Without collateral, it was unable to secure a loan, and the government refused to advance it the funds needed to complete the project. Only 77 of the 300 houses had been built; half the community was still living in Coco Solo. Furious at the state's mismanagement of the project, residents closed the street yet again, this time for 27 hours. "Nobody was going to get through", said Armando, who participated in the protest: "Not one semi, not one container, not one car, not one worker … They would have had to kill children, old people, moms, dads, because the kids and everyone were in the street." According to residents, the blockade gave new impetus to negotiations with officials. In October 2014, the administration of Juan Carlos Varela announced that it had revoked the builder's construction contract and would put it back out for tender. The remaining houses were finally completed in 2016, and Colon Container Terminal took possession of the Coco Solo site. That June, the old naval barracks were demolished to make way for a new logistics park.

Learning from Coco Solo

What lessons does the Coco Solo experience hold for the theory and praxis of logistical resistance? Following the logic of the choke point thesis, disruptions to cargo flows on the Isthmus of Panama would be expected to be a source of significant leverage for protesters seeking to exert pressure on the state or capital. The Panama Canal is a paradigmatic "high-traffic line" in the global logistics network, handling some 5% of world maritime trade. The canal is complemented on land by the transisthmian railway and truck routes, high-traffic lines in their own right, which enable transshipment operations between port terminals on the two coasts. These lines articulate with several high-traffic nodes, including Panama's

free trade zones and container ports, which enjoy high levels of international connectivity on account of the ship traffic using the canal. The entire transit zone can be thought of as a supernode, a dense concentration of logistics infrastructure that functions, at least in principle, as a single transfer point within the global goods-movement system. In this context, timelines are tight and the tolerance for disruptions is low, particularly for ships that have reserved passages through the canal and for transshipment cargo moving by land between the port terminals. This point was underlined by Julio Quijano, a maritime lawyer based in Panama City, in an interview: "The Panama Canal, it's a very unique environment, and it requires very particular services. And these vessels, they have to move. A vessel that is stopped is not getting paid."

Coco Solo occupied a critical position within this logistics cluster. Armando, closely echoing Quijano's words, indicated that community members had a well-honed analysis of the leverage they derived from their strategic location:

> The only thing the government pays attention to is when we shut down the street. And that street, shutting it down is millions in losses for the ports. Because if we shut it down, the ship leaves. The ship doesn't wait for anyone. The ship has to leave on time.

Data suggest that the blockades in Coco Solo did indeed have appreciable economic costs. In 2014, the two container ports on Randolph Avenue together handled 2.57 million TEU of freight, an average of 7,052 TEU per day (AMP 2014). Assuming even a modest cargo value of $30,000 per TEU, the disruption of just 10% of one day's traffic would have affected the movement of over $21 million worth of goods at the ports alone. The industry's own statements lend credence to this assessment: after one closure, Colon Container Terminal cited losses of millions of dollars and threatened to file a lawsuit against the government (Córtez 2009). The effectiveness of the community's actions was also attested by the responses of the state, which repeatedly sent high-ranking officials to negotiate with protesters and deployed riot police to disperse them. Insofar as they had tangible economic impacts that provoked swift reactions from capital and the state, the roadblocks in Coco Solo underscore the leverage available to groups that seize a critical choke point in the supply chain.

Why, then, did residents struggle to translate their capacity for economic disruption into the social power necessary to enforce their claims? Why were their demands for secure, adequate housing met with 13 years of empty promises and inaction—and ultimately heeded only when authorities needed them out of the way? Here we encounter the explanatory limitations of the choke point thesis, with its emphasis on structural power and strategic position. The Coco Solo case highlights the difficulty in treating a particular form of protest (the blockade) as a sufficient condition of social power, a definitive predictor of outcomes, or a universal recipe for resistance. Understanding why the community's actions had ambiguous results requires attention to a range of contingent conditions that influence the power of counterlogistical movements. On the one hand are tactical considerations, such as the timing of actions, their duration and frequency, and the number of closures that can be maintained simultaneously. These elements

can be exploited to magnify the impacts of blockades, create backlogs of traffic that take additional time to clear, or prevent carriers from using alternative routes. Few studies of circulation struggles have taken seriously the implications of redundancy and flexibility in today's supply chains, where a disruption in one location may simply result in freight being diverted somewhere else (Danyluk 2019; Sowers et al. 2014). In container shipping, for example, the relative ease with which cargo can be rerouted to alternative ports acts as a check on attempts to stop capital in its tracks. Similar dynamics played out in Coco Solo when Colon Container Terminal was able to partially circumvent the community's blockades by chartering a boat service to shuttle dockworkers (though not freight) to and from the port (Cortéz 2009). It is also the case that critical infrastructure, precisely because of its strategic importance and vulnerability, tends to be the object of concerted efforts by government and business to protect against disruption. In Panama, the preoccupation with supply chain security seen in the national logistics plan and at trade conferences took concrete form in legislation prohibiting strikes by Panama Canal employees and the aggressive policing of roadblocks such as those in Coco Solo. Together, the realities of redundancy, agility, and securitisation in today's capitalist commodity chains militate against any facile notion of logistical disruption.

On the other hand, and intertwined with these tactical concerns, are questions of political organisation. While the choke point thesis calls attention to the economic damage that can be inflicted by a small number of protesters, the mobilisation of frequent, sustained, and widespread blockades necessitates a critical mass of participants. It follows that effective logistical resistance, like other forms of direct action, requires relatively durable collective actors unified by some understanding of shared values, identities, or interests. The people of Coco Solo had a certain sense of collective identity, rooted in their common experience of racial and economic oppression, inhumane living conditions, and mistreatment by the government. They also had broadly shared interests in securing decent housing. But their understandings of how to pursue those interests differed: for some it entailed demanding permanent housing from the state, while for others it meant exiting their situation of dependence and finding new housing on their own terms. According to residents, these divergent strategies led to organisational fragmentation within the community, limiting the effectiveness of residents' actions and their power to compel authorities to accede to their demands. Compounding these issues of political cohesion was the challenge of building coalitions beyond Coco Solo, including with constituencies that represented potential sources of solidarity. Unionised port workers, for instance, had they been willing allies in the community's struggle, might have increased residents' leverage by refusing to circumvent their picket lines.

These observations underscore the inseparability of structural and associational power: even the most strategically positioned and carefully planned blockades are unlikely to realise their aims without forging wider political connections (Olney 2018). In Coco Solo, a focus on short-term economic disruption rather than internal unity and external coalition building allowed state actors to respond with unproductive "dialogues" and conciliatory gestures that temporarily quelled

residents' anger while dragging out their struggle over nearly two decades. The significance of tactical, organisational, and political considerations in shaping the outcomes of the community's actions illustrates the importance of combining abstract theoretical propositions such as the choke point thesis with situated analyses of conditions on the ground. The interruption of commodity flows doubtless constitutes a *potential* source of social power, but whether that potential is realised in a given situation depends on contingent factors that can only be diagnosed through empirical investigation.

Pervasive discrimination against Coco Solo residents and the scant media attention given to their plight—reflections of the interlocking forms of oppression they faced as a low-income Black community—likewise posed an obstacle to attracting public visibility, popular legitimacy, and mass support. Indeed, the spectre of race and racism, so often disavowed in Panama in favour of discourses of national unity and a monolithic Panamanian culture (Sigler et al. 2015), looms large over the community's struggle and the state's response. Authorities' persistent disregard for the living conditions and grievances of Coco Solo residents is indicative of an implicit state policy of racialised neglect and dispossession in Colón, justified by popular representations of the city as a Black "ghetto" inhabited by an unemployed underclass. A decades-long pattern of state-sponsored abandonment of poor Afro-Panamanian communities and their displacement to Colón's peripheries, often under the rubric of facilitating housing "solutions" or housing "choice", can be understood as a racialised, neoliberal project of urban dispersal that serves to render the city attractive to private investment (Amen Strayhorn 2014). As the Coco Solo case suggests, the weight of anti-Blackness is such that even social movements in a position of considerable structural power may, under that weight, struggle to convert their position into meaningful gains.

The case also calls attention to the diverse types of struggles in which logistical resistance is deployed and the multiplicity of actors it entrains. If critical studies of logistics have generally depicted supply chain disruption as the preserve of either workers engaged in industrial disputes or insurgents engaged in revolutionary battles, Coco Solo serves as a reminder that such tactics are regularly employed throughout the majority world in popular struggles over land, housing, and livelihoods. Communities, like workers and insurrectionaries, have long exploited their proximity to strategic infrastructure to amplify their grievances and bolster their demands, even when those actions are not expressly framed in terms of choke points, counterlogistics, or capitalist circulation. In Latin America, grassroots movements in Bolivia, Ecuador, and Argentina have honed the use of roadblocks, barricades, and occupations to interrupt and control the circulation of goods and bodies through urban and rural territories (Zibechi 2012). Rather than idealise the blockade as a tactic, these movements theorise their actions in expansive, open-ended terms, treating them as part of a broader political struggle that gains strength from mutual support and collective organisation. The experiences of this tradition can enrich understandings of logistical resistance, just as the insights of choke point theory can serve to strengthen popular struggles over livelihoods.

A final, and related, point connects to the idea of the social factory. As the assembly line has been stretched across global space, growing numbers of people

have been brought into contact with capitalist commodity chains, often on adverse terms—as operatives, managers, customers, neighbours, or environmental sinks. While the struggle in Coco Solo was outwardly a dispute with the state over housing, the community's deteriorating living conditions and eventual displacement were ultimately consequences of the growth of neighbouring logistics activities. For residents, the disruption of goods movement was thus a means of protesting injustices that stemmed in part from the movement of goods itself. Scholars of logistics have made much of the distinction between production and circulation, but in the spaces of everyday life these functions often blur together. Consider the port: as a place of production for the shipping industry, the port is a site of workplace struggles (e.g. dockworkers agitating for better labour conditions), but the port's role in the distribution of essential household goods and its embeddedness within its local or regional context means it is also implicated in struggles over social reproduction (e.g. struggles over food prices, community groups fighting air pollution). Counterlogistical movements have available to them a multiplicity of constituencies—workers, communities, consumers, environmentalists—with which to assemble powerful coalitions to oppose the manifold harms of supply chain capitalism.

Conclusion

This article has sought to offer a critical assessment of the prospects for resistance in the circulatory systems of global capitalism. In conversation with literature on choke points and counterlogistics, I have highlighted the tensions and ambiguities that often accompany moments of logistical disruption. Circumstances on the ground and the balance of social forces, I suggest, can overpower the structural conditions emphasised in the choke point thesis, limiting the force of such actions even where they might be expected to be most effective. This is not to say that a well-executed blockade cannot be a source of power; rather, it is to stress that the strength of logistical sabotage, like any tactic, is always mediated by contingent conditions. Animating this inquiry is an insistence that social movements do not have to be successful to be instructive. There is much to be learned from struggles that do not decisively achieve their aims, particularly under seemingly ideal conditions.

I have also suggested that, beyond workers and revolutionaries, the tools of logistical disruption can be taken up by a range of actors involved in diverse struggles, including place-based struggles over social reproduction. Counterlogistical movements can build considerable associational power insofar as they forge linkages across a broad cross-section of society. One such moment crystallised in Canada in January 2020, when a raid by police on the unceded territory of the Wet'suwet'en people to make way for a natural gas pipeline unleashed a wave of blockades and occupations across the country. In solidarity with Wet'suwet'en hereditary chiefs, Indigenous land defenders and allies blocked rail lines, container ports, ferry terminals, highway bridges, government buildings, and city streets, stalling commercial ships and forcing the cancellation of thousands of passenger and freight trains. The protests served as a vivid illustration of the power of

logistical resistance, especially when backed by vigorous organising and mass solidarity. As Cowen (2014) and Toscano (2014) have noted, disruption also contains a moment of creation: the possibility of forging new relations of production and circulation. The political space created on the blockade often prefigures the transformed social relations it seeks to bring into being. A focus on the generative power of such actions might point a path from resistance and interruption to the more expansive project of imagining and building alternative futures.

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Endnotes

[1] As Toscano (2014) notes, Marx used "circulation" variously to refer to, among other things, the physical movement of goods, the exchange of commodities in the market, and the metamorphosis of value within the circuits of capital. At pains to distinguish between the spheres of production and circulation, though, he stressed that the transportation of commodities, by virtue of adding to those products' value, fell squarely on the side of production (Marx 1978). By this definition, then, actions like port closures and rail blockades would strictly speaking constitute struggles in the sphere of production. In fact, the logistics revolution has entailed the extension of productive activities into warehouses and other traditional spaces of circulation. As Moody (2017:63) writes, "most warehouse labour today involves the movement, relocation, and additional manufacture of goods and is more akin to transportation or even manufacturing labour than that of mere storage".

[2] All translations are my own unless otherwise noted.

[3] Among the factors that contributed to the deterioration of Colón's housing stock were a rent freeze and a ban on evictions by the military regime of Omar Torrijos, which, in the absence of other state supports, created an incentive for landlords not to maintain their properties.

[4] The names of residents have been changed to protect anonymity.

[5] While under US control as part of the Panama Canal Zone, the mangrove forests surrounding Coco Solo were regularly used as a dumping ground for waste products, including metal sheeting and metal equipment (McKinley and Piette 2007). Some Coco Solo residents collected these metals and sold them for income.

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