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– 'MORTAL FEAST': Cannibal Capitalism Meets Covid-19 in the Urban Peruvian Amazon

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Abstract

This article presents a surrealist urban political ecology of cannibal capitalism in the zoonotic city. It does so through an account of the first wave of the coronavirus pandemic in Iquitos, in the Peruvian Amazon, which was the worst-hit city in the world during this initial wave. Iquitos embodies multiple dimensions of zoonotic urbanization identified in the literature on this theme, including integration into planetary urban networks; expansion into extractive frontiers; and overcrowded housing in informal settlements in a context of crumbling infrastructures and deficient services. Drawing on extensive field research, I argue that the severity of the pandemic in the city nonetheless suggests the need for further conceptual and methodological contributions to this literature. In conceptual terms, the emergence of a clandestine market in oxygen, the shortage of which was responsible for the majority of the excess deaths in Iquitos, illustrates the constitutive role of cannibal capitalism in processes of zoonotic urbanization, as a necropolitical form of capital accumulation that devours the socioecological foundations of its own reproduction. In methodological terms, an ethnographic surrealism is required in order to adequately convey the bewildering chaos, grotesque absurdity and gothic horror of the collision between cannibal capitalism and Covid-19 in the zoonotic city.

Introduction

Juan Pablo Vaquero Arirama awoke into a suffocating nightmare. He fought himself out of the black garbage bags in which he had been wrapped and slid down a pile of stinking corpses onto the bare red ground. He staggered to the highway and turned instinctively towards the city. He remembered nothing. The edges of Iquitos gradually gathered around him as he trudged along the empty road. The city was deserted, apart from silent queues outside the pharmacies and people standing beside tall green cannisters in front of an oxygen factory. There were vehicles stranded at military checkpoints. Dead bodies lay under blankets on street corners. He somehow found his way to a tin-roofed shack, where his shocked sister let him in. She told him that she had taken him to the Regional Hospital three days before, where people were dying all around them. He had been declared dead. But in the chaos and carnage she had not been allowed to see his body. She now realized that he must have been taken to the mass grave that the government had secretly opened on the outskirts of Iquitos. There, along with dozens of bodies hastily wrapped in black plastic, he was dumped under cover of darkness.

Uncle Covid, as Juan Pablo Vaquero came to be known, swiftly became a legend in Iquitos, the principal city of the Peruvian Amazon, and the largest city in the world with no road access. His extraordinary story struck a chord with a desperate urban populace confronted with the apparent collapse of their collective social reality. Vaquero had been admitted to the city's main hospital in the midst of the first wave of the

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coronavirus pandemic, towards the end of April 2020. The epidemiological evidence suggests that Iquitos was the worst-hit city in the world during this initial wave, in terms of both infections and deaths. Research conducted towin July 2020 found that 70% of the city's inhabitants had already contracted the Covid-19 virus—a percentage far greater than that of any other city for which records exist (Chenet and Tapia-Limonchi, 2021). Despite having imposed one of the earliest and most draconian lockdowns in Latin America, Peru had the highest death rate from Covid-19 of any country in the world (The Guardian, 2021), and the region of Loreto—of which Iquitos is the capital—had the highest rate in Peru, exceeding the country's average number of weekly deaths by over seven times at the peak of the first wave (Silva-Valencia *et al*., 2021). In the first week of May 2020, over 100 Covid deaths were recorded every day in Iquitos, a city of 426,000 inhabitants (Álvarez-Antonio *et al*., 2021; He *et al*., 2023). Many more went unrecorded, and the final death count is unknown (Silva-Valencia *et al*., 2021). In the words of one local doctor, 'It was a total massacre'.[1]

This article provides a detailed account of the first wave of the coronavirus pandemic in Iquitos in an attempt to grasp the urban political ecology of this extreme event at the level of its lived experience and with the aim of deepening our understanding of the 'zoonotic city' (Gandy, 2022). Over the course of the past two decades—and in the wake of Covid-19 in particular—a rich literature has emerged on the multifaceted process of 'zoonotic urbanization' (Gandy, 2023). This literature has drawn attention to the relationship between accelerating processes of extended and planetary urbanization and the rapid proliferation of zoonotic and vector-borne diseases (Orford *et al*., 2023; Keil *et al*., 2024). Contributing factors include the movement of diseases between wild animals, industrial livestock and human beings on extractive frontiers and in operational landscapes at the fringes of the planetary urban system (Brenner and Ghosh, 2022); the rapid propagation of viruses through integrated networks of global cities and in the overcrowded homes and workplaces of improvised settlements on impoverished urban peripheries (Wolf, 2016; McFarlane, 2023); the opportunities for diseases like cholera and leptospirosis to spread through untreated water, and for malaria and dengue-bearing mosquitos to propagate in the stagnant pools that gather in the derelict infrastructures and uncollected garbage with which such peripheries are strewn (Gandy, 2022); and the unregulated expansion of these urban fringes into jungles in which human beings and livestock again intermingle with depleted populations of wild animals (Connolly *et al*., 2021).

Iquitos is a paradigmatic zoonotic city in all these respects. Its economy is based on the extractive ransacking of the vast surrounding jungles of Loreto, and despite being unconnected to the national road network, it receives multiple daily flights from the Peruvian capital of Lima through which it is integrated into global tourist and business networks. It is also one of the poorest cities in Peru and is largely comprised of informal settlements characterized by overcrowded housing and precarious labour conducted largely in densely populated markets. These settlements are located on frequently flooded land at the edges of the rainforest, where rotting garbage is amassed in vast quantities, dysfunctional infrastructures proliferate and epidemics of diseases such as malaria, dengue and leptospirosis are widespread (Varón and Maza, 2014; Wilson, 2022a; 2023a; 2023b).

As we shall see, several of these factors contributed to the severity of the pandemic in Iquitos. But there are dimensions of the catastrophic urban breakdown generated by Covid-19 in Iquitos that are not adequately captured by the existing literature on zoonotic urbanization and that suggest the need for further conceptual and methodological contributions. In conceptual terms, while this literature attributes

1 Carlos Dávila, cardiologist, interview by author, 21 July 2022, Iquitos.

many characteristics of the zoonotic city to the pathologies of 'neoliberalisation and privatisation' (Connolly *et al*., 2021: 256), 'urban neoliberalism' (Orford *et al*., 2023: 1341) and 'neoliberal capitalism' (Brenner and Ghosh, 2022: 867), the precise role and modality of capital accumulation are rarely explored in depth, with greater attention afforded to the connections between infectious disease and urban form. The case of Iquitos suggests that this somewhat cursory framing of the political economy of the zoonotic city in terms of neoliberalism is insufficient, and this article accordingly brings this literature into dialogue with work by critical scholars in other fields who have sought to capture the horror and brutality of the political economy of Covid-19 with correspondingly violent terminology. In their analysis of the pandemic in the UK, for example, Robert Knox and David Whyte (2023) draw on the concept of 'gore capitalism', which the cultural theorist Sayak Valencia has developed to capture the necropolitical hyperviolence of narcocapitalism in Tijuana (Valencia, 2018). In contrast to Achille Mbembe's influential understanding of necropolitics in terms of the sovereign power 'to dictate who may live and who must die' (Mbembe, 2003: 11), Knox and White follow Valencia in arguing that the necropolitical operations of gore capitalism are ultimately an expression of capitalist social relations, and insist that the distribution of death in the Covid economy therefore 'needs to be understood within the wider context of the extraction of value' (Knox and Whyte, 2023: 330).

This perspective is shared by the political philosopher Nancy Fraser, who conceptualizes the decadence and destructiveness of the contemporary global political economy in terms of 'cannibal capitalism', which 'persistently devours the very supports on which it relies', including health care and other elements of social and ecological reproduction (Fraser, 2022: 24). As such, cannibal capitalism not only involves the metaphorical cannibalization of one class by another but also threatens the terminal self-consumption of the system's own underlying conditions of possibility. Fraser interprets the venal and incompetent responses of state and capital to Covid-19 around the world as the apotheosis of this form of accumulation: 'a veritable orgy of capitalist dysfunction' (*ibid*.: 160). Although she does not discuss Iquitos, it was here that cannibal capitalism was revealed in its most depraved form, in the collapse of the gutted local health system and the emergence of a clandestine market in oxygen through which a necropolitical fusion of free market economics, systemic corruption and organized crime exploited a desperate and defenceless population. In the words of an Iquitos-based economist, 'In this fatal outcome, the commercial cannibals appeared' (Grandez, 2020: 2), and the vast profits made from widespread immiseration and mass death were described by a local activist as 'a mortal feast' (*un festín mortal*).[2]

Like the story of Juan Pablo Vaquero rising from the dead, these anthropophagous allusions are indicative not only of the decomposition of the social fabric but also of the simultaneous disintegration of the symbolic coordinates of everyday reality that characterized the lived experience of Covid-19 in Iquitos. This suggests the need for radical methodological experimentation in order to adequately grasp and convey the disorienting phenomenology of the zoonotic city. This necessity has been emphasised in the wider critical literature on the pandemic, which has problematized the tendency for academic sense-making to erase the chaos and absurdity that marked so many of its social manifestations (Sloan, 2020; Gonda *et al*., 2021; Venkatesan and Joshi, 2022). The inadequacy of such conventions has also been noted by key contributors to the literature on zoonotic urbanization. Matthew Gandy, who coined the concept of the zoonotic city, has observed that its daunting complexities have 'engendered metaphors of epistemological monstrosity, pushing existing theoretical frameworks to their limit, and upending conventional conceptions of urban space' (Gandy, 2023: 2530). And

2 José Manuyama, environmental activist, interview by author, 19 July 2022, Iquitos.

in a path-breaking article published in this journal, Meike Wolf has similarly called for 'a focus on messiness', given that 'the messy nature of urban infectious disease ecologies cannot be abbreviated to what is found in concepts … By unravelling formerly invisible things, connections or actors, we enable them to enter new domains of theory' (Wolf, 2016: 978).

Both Gandy and Wolf identify ethnography as a potentially fruitful though hitherto underutilized methodology in this regard, due to its unique capacity to capture the fine-grained specificities of lived experience in local contexts (Wolf, 2016; Gandy, 2023). Although they do not elaborate on this suggestion in any detail, other commentators on everyday life during the pandemic have noted the surrealistic quality of urban lockdowns (O'Connell, 2020; Wilson, 2022b), in which 'the basic coordinates of the lifeworld of millions [were] disintegrating' (Žižek, 2021: 7) and 'the surreal became the most effective discourse to respond to the alarmingly real situation of life under the pandemic' (Conley and Mahon, 2024: vii). In the words of the surrealist ethnographer Michael Taussig, the pandemic generated conditions for which 'the aesthetic of a dark surrealism is relevant. It is a mutating reality of metamorphic sublimity that never lets you know what is real and what is not' (Taussig, 2021: 34–35). This article aims to make a methodological contribution to the urban political ecology of the zoonotic city through the deployment of an 'ethnographic surrealism' of this kind (Clifford, 1981; Lusty, 2017). As Max Clifford argues in his seminal paper on the topic, whereas 'ethnographic humanism begins with the different and renders it … comprehensible', ethnographic surrealism 'attacks the familiar, provoking the eruption of otherness—the unexpected' (Clifford, 1981: 562). Far from the escape into fantasy with which surrealism is often misleadingly associated, this approach should be understood as a radical form of realism that is committed to revealing 'that great steaming morass of chaos that lies on the underside of order' (Taussig, 1987: 4).

The article thus presents a surrealist urban political ecology of cannibal capitalism in the zoonotic city. In addition to archival research and reviews of local, national and international news media, I draw on a 12-month ethnographic study of Iquitos, which began in June 2022 and included 39 unstructured interviews about the first wave of the coronavirus pandemic as experienced by politicians, civil servants, community leaders, priests, doctors, health workers, journalists, authors, academics, activists and everyday inhabitants of the city. Following this introduction, the next section locates the arrival of Covid-19 in Iquitos at a crisis point in a complex unfolding relationship between cannibal capitalism, infectious diseases and urban transformation. The third section details the catastrophic situation in the hospitals at the height of the first wave, the emergence of the clandestine oxygen market and multiple associated forms of corruption. The fourth section explores the lived reality of those whose poverty excluded them from the hospitals and oxygen markets, and the establishment and operation of the mass grave in which their bodies were disposed. The penultimate section returns to the case of Juan Pablo Vaquero—aka Uncle Covid—in a detailed exploration of this apparent urban myth, which acquires deeper significance in the context of the preceding sections. The article concludes with some reflections on its central themes in the context of planetary socioecological breakdown.

Cannibal capitalism and the zoonotic city

Prior to the arrival of Covid-19, Peru had one of the highest sustained growth rates and lowest debt-to-GDP ratios in South America and was widely regarded as a neoliberal success story (Cameron *et al*., 2023). But these headline figures concealed persistently high levels of poverty and informality, as well as one of the lowest levels of public investment in health care on the continent (Schwalb and Seas, 2021; Lust, 2023). They also belied the extent to which Peruvian neoliberalism was dependent on mining and illicit extractive industries dominated by transnational capital on one

hand and organized crime on the other, which had contributed to the emergence of a form of accumulation better understood in terms of cannibal capitalism (Crabtree and Durand, 2017; Lust, 2022). Nowhere was this system more entrenched than in the region of Loreto, of which Iquitos is the capital. The Peruvian Amazon, of which Loreto constitutes by far the largest part, has been controlled by extractive interests in close alliance with political elites ever since the rubber boom of the late nineteenth and early twentieth centuries (Santos Granero and Barclay, 2015), and in recent years the local state has come to be dominated by illegal logging, gold mining and cocaine-trafficking mafias, which utilize opaque forms of campaign financing to access the oil rents accruing to the regional government via revenues siphoned from corrupted public works. In 2020, Loreto was judged to be the most corrupt region of Peru (Ministerio Público, 2020).

This self-consuming state has contributed to the characteristics of the zoonotic city embodied by Iquitos listed in the introduction, which have generated multiple epidemics of zoonotic and vector-borne diseases in recent decades. In 1991, the inadequate water, sewage and electricity infrastructures of the city, along with the amassing of uncollected garbage in the streets, contributed to an outbreak of cholera that resulted in 138 deaths (Nájar, 1991; Vásquez Valcárcel, 1991). Since then, further cholera epidemics have been accompanied by endemic levels of malaria and dengue, as well as outbreaks of diseases including leishmaniasis, hepatitis B, yellow fever, typhoid, whooping cough, measles and leptospirosis (Nájar, 2004; *La Región*, 2019a).

The human cost of these epidemics has been exacerbated by long-term governmental neglect of the local health system. Peruvian health care is extensively privatized and fragmented, and highly unequal in its standards of provision. Private clinics attend to those who can afford them, while public-private partnerships dominate public provision. The public system is divided between hospitals operated by the social security insurance system EsSalud, which are reserved for the minority in formal employment, and more basic hospitals operated by the Ministry of Health, which constitute the only health care available to the majority of the population (Gianella *et al*., 2021; Schwalb and Seas 2021; Cameron *et al*., 2023). The standard of this care is starkly illustrated by the Regional Hospital of Loreto, which is the main public hospital in Iquitos. Its construction was financed by oil revenues accruing to the regional government, and it was inaugurated with great fanfare in 1983. By 2008, however, following decades of corrupt administration, the hospital was depicted as a labyrinth of 'empty offices, inoperative operating rooms, entirely deserted floors … lifts that do not work, water that does not flow, medical apparatuses that do not function …' (Tafur Rengifo, 2008: 3972). In 2018 Elisban Ochoa Sosa was elected governor of Loreto following a remarkably ostentatious gubernatorial campaign that had allegedly been financed by the most powerful narcotrafficker in Iquitos (Aguirre, 2019). Despite Ochoa's promise to save the health sector, by December 2019 conditions had deteriorated to such an extent that the Regional Hospital was forced to refuse treatment to dialysis patients who could not provide the basic medical equipment for their own procedures, including syringes, catheters and surgical gloves (*La Región*, 2019b). And in January 2020, immediately prior to the arrival of the coronavirus pandemic, Ochoa threatened to fire staff who had gone on strike demanding protective equipment in the midst of simultaneous dengue and leptospirosis epidemics (*La Región*, 2019a; Hidalgo, 2020).

These worsening circumstances led the Federation of Journalists of Iquitos to publish an open letter, which concluded: 'We cannot continue down this route … as a society handcuffed by tentacles of corruption controlled by individuals and organized gangs that have captured almost every element of public power' (Ramos Tenazoa, 2019). Yet, despite this disturbing panorama, most inhabitants of Iquitos were unconcerned by news of the coronavirus pandemic unfolding in China and Europe, and the national lockdown announced on 16 March 2020 was generally ignored in the city. This was due in part to the widely shared assumption that the city's lack of road access would protect

Iquitos from such a geographically distant disease. This assumption was immediately belied by the announcement of the city's first reported case of coronavirus the very next day. An employee at a jungle tourist lodge was said to have contracted Covid-19 from a group of Chinese tourists, before returning to his home in an informal settlement on the outskirts of Iquitos (Britto Palacios and Roeder Carbo, 2023). From there, the virus quickly evaded attempts to monitor its spread, and by early April the city was reporting its first deaths from the disease. News of these deaths, however, had little effect on the continued popular refusal to obey the lockdown, despite the widespread installation of police and military checkpoints and the conducting of patrols and raids throughout the city. This refusal was primarily an expression of economic necessity, in a city in which over 60% of the population are classified as either poor or extremely poor (Álvarez-Antonio *et al*., 2021) and over 70% of workers are employed in the informal sector and living 'from one day to the next' (*día a día*). The choice for these workers, as one inhabitant expressed it in retrospect, was stark in its simplicity: 'If I don't work today, I don't eat. If I go out to work, I'm going to die from Covid, but if I stay at home I'll die as well … With or without Covid, I'm sentenced to death by the system. I have nothing to eat. I have to work'.[3]

For most of the informal workforce of Iquitos, this meant spending each day buying, selling, cooking and transporting goods in and between the packed ports and markets of the city, from which they would carry Covid-19 back into their overcrowded and multigenerational homes. These circumstances were explained to me by Roberto Danilo Tello, who had been the general manager of the Regional Government of Loreto (GOREL) throughout the first wave:

> The majority of the population [of Iquitos] live in houses with four or five families … 10 or 15 people, in a space of … 4 [metres] by 20 [metres]. Without many comforts. With a zinc roof that makes it feel like you are living in a microwave oven, with a thermic sensation of over 40 degrees. What do you do if you have nothing to eat and are being cooked alive under your own roof? You go out on the street … You contract the virus. And without wishing to do so, you become a vector of transmission of the virus. Due to necessity. People were desperate.[4]

This desperation intensified as the lockdown continued. On 12 April, an alligator farm on the edge of Iquitos, which produced skins for the global market, was raided by an armed gang who hacked up the animals with machetes and stole their flesh for sale and consumption (*Pro y Contra*, 2020c). Four days later, rumours that a garbage truck had dumped a load of out-of-date foodstuffs led to the ransacking of a makeshift refuse tip in the centre of the city (*Pro y Contra*, 2020a). When the national government sought to ameliorate the situation by issuing a cash transfer of 380 soles (USD110) for informal workers (Dinegro Martínez, 2020), police had to be deployed to break up huge crowds that had formed around the bank from which the cash was to be dispersed, and security forces clashed with demonstrators burning tyres and blockading a highway on the outskirts of the city in protest at their exclusion from the payment. Attempts to restrict access to markets similarly resulted in the formation of queues stretching for several blocks, which repeatedly collapsed into dense agglomerations when people rushed for shelter during rainstorms. The words of three of those waiting in one such queue conveyed the alarming absurdity of the situation: the government 'might want to impose order but all they are doing is creating chaos'; 'they don't want agglomerations and yet they are generating this'; 'they have lost control of Covid-19' (*Pro y Contra*, 2020d).

3 Inhabitant of an informal settlement in Iquitos, interview by author, 25 November 2022, Iquitos.
4 Roberto Danilo Tello, general manager of the GOREL during the first wave of the Covid-19 pandemic, interview by author, 16 December 2022, Iquitos.

Meanwhile the number of people requiring emergency treatment for the virus was rapidly increasing. The private clinics of Iquitos swiftly closed their doors, and the EsSalud hospital announced that it was not accepting Covid patients, placing the entire problem in the hands of the Regional Hospital, which had only seven ICU beds, according to Carlos Calampa, the director of the hospital at the time.[5] Many doctors and other medical staff stopped coming to work, and those who remained were forced to operate with a near-total absence of personal protective equipment (PPE). These factors compounded the drastic circumstances already confronting the Regional Hospital prior to the pandemic. By the third week of April, the number of deaths was increasing exponentially and the health system had effectively collapsed (Fraser, 2020). At this point, in Calampa's words, 'the situation became intolerable. [Covid-19] overwhelmed the entire installed capacity of the hospitals … The velocity of transmission advanced brutally, extremely rapidly. It was exponential, terrifying'.[6] As another doctor at the Regional Hospital subsequently reflected, 'Iquitos became the model of an uncontrolled epidemic, which we were unable to diminish in any way. The epidemic simply struck us like a tsunami' (quoted in Britto Palacios and Roeder Carbo, 2023: 16).

An anthropophagous urban political ecology of oxygen

The principal cause of the unprecedentedly high death rate in Iquitos during the first wave of the coronavirus pandemic was a chronic lack of medical oxygen in the city. Like much of the equipment in the Regional Hospital, its oxygen plant was not functioning properly at the time and was only capable of filling between 20 and 30 tanks a day. In addition, two companies controlled the commercial production of medical oxygen, each of which had a daily production capacity of 30 tanks. Iquitos could thus fill a total of 80 to 90 tanks a day, which was little more than one-tenth of the quantity required at the height of the first wave.[7] By this point, a full 10-litre tank of oxygen cost 5,000 soles (USD1,430) or more, with a refill costing between 1,000 and 1,500 soles.[8] A full tank would last 12 hours at most, and many middle-class families rapidly exhausted their savings in the purchase and repeated refilling of oxygen tanks in their frequently futile efforts to keep their loved ones alive. There were multiple reports of people stealing oxygen tanks from dying patients and of patients dying at the entrances to the hospitals or collapsing dead while waiting in line. A woman who lost four family members in a single week described the case of her uncle:

> We took him to [the EsSalud hospital]. We arrived and the hospital was full, full, totally full. We were looking for a bed for him, but there weren't any. We saw people running—they got out of cars and motorcycle taxis and came running, shouting, pleading for help, and they fell down right there. They fell down dead. And no one approached them. The nurses would pass by and have a look, then come back and put them in a black bag. They left them there in a black bag. Then a while later they came back and took them away. And seeing that only made my uncle more desperate … I was looking after him … [My family] were searching for oxygen desperately, buying it, queueing in one place, queueing in another place in the middle of the night, for them to sell you a tank that was only a quarter full. There wasn't enough oxygen. They didn't sell you a full tank. They only sold you a bit … You'd refill it and start using it at 5 am, and by 10 am

5 Carlos Calampa, director of the Regional Hospital of Loreto during the first wave of the Covid-19 pandemic, interview by author, 19 July 2022, Iquitos.
6 Calampa, interview.
7 Calampa, interview.
8 Prior to the pandemic, by contrast, the market price for a full tank of medical oxygen in Iquitos had been 700–900 soles (Britto Palacios and Roeder Carbo, 2023), while the price of a refill was 50–60 soles (Calampa, interview). The average family income in Iquitos at the time was under 1,000 soles a month (Chirif, 2020).

> it would have run out again, and you'd have to go hunting, hunting … Everyone was searching for oxygen and bringing it to [my uncle] … But we could see that he was slipping away. We were practically watching him die and there was nothing we could do. There was nothing we could do. He said, 'Help me, I can't breathe'. He called out to us, 'I can't breathe', and we didn't know what to do. We didn't have oxygen. We couldn't find oxygen.[9]

Such scenes led Janeth Reategui, a regional councillor, to note 'the irony that, in the place we call "the lungs of the world", we were lacking oxygen'.[10] Reategui was tasked with monitoring the activities of the regional government, a role that she had earned a reputation for performing with unusual rigour. Elisban Ochoa and other local politicians and functionaries had abandoned their offices as the crisis deepened, claiming to be suffering from Covid-19 and other health conditions and failing to provide any form of leadership. But as Reategui explained, many of these leaders not only neglected to impose any controls on the illicit oxygen market but were heavily involved in the market themselves. This ad hoc market was highly decentralized, comprising multiple opportunistic agents rather than being controlled by a single actor. The two oxygen companies of Iquitos both engaged in price gouging and were accused of selling tanks that were only half or even a quarter full, while organized gangs were accumulating tanks that they filled and distributed via social media in exchange for empty ones. But the regional government was the only agent with access to additional supply. In the words of its own general manager, 'There was a black market in oxygen, and it is obvious that [the majority of the oxygen] had to be coming from the government'.[11]

The main form in which local government functionaries were involved in the market was in the theft and resale of oxygen tanks arriving on emergency flights from Lima. Initially, the central government had failed to provide any supplementary oxygen to Iquitos. But towards the end of April, in response to images in the international media of the city's morgues overflowing with bodies wrapped in black garbage bags, the government began sending daily flights to Iquitos, each of which contained around 60 oxygen tanks. As Janeth Reategui confirmed, 'As soon as they arrived in the airport, [many of the tanks] disappeared … They were stolen by those who were in charge—the functionaries of the GOREL … Everyone was desperate, everyone was fighting for their own family. And the functionaries were looking after their own interests as well'.[12]

Among those accused of stealing the oxygen tanks was Elisban Ochoa himself, and a raid led to the discovery of several tanks stashed in his brother's house.[13] The governor was further accused of spending emergency funds transferred from the central government in non-transparent ways and of paying inflated prices for medical supplies, including the purchase of 500 oxygen tanks from a company with connections to another GOREL functionary (Collyns, 2020; Hidalgo, 2020). In engaging in such machinations, Ochoa was widely considered to be acting not only in the interest of his personal enrichment and survival but primarily on the instruction of his illicit financial backers, who were demanding that the crisis be utilized for the repayment of campaign debts. Staff at the Regional Hospital also took advantage of the chaos to steal tanks and resell them,[14] and both hospital staff and members of the GOREL were likewise involved in a clandestine market in medicines (*Pro y Contra*, 2020b; 2020e). A subsequent congressional investigation found that the GOREL had failed to account for 'the

9 Inhabitant of Iquitos city centre, interview by author, 25 July 2022, Iquitos.
10 Janeth Reategui, regional councillor of Maynas, interview by author, 3 August 2022, Iquitos.
11 Tello, interview.
12 Reategui, interview.
13 Luz Herrera, journalist at the Iquitos-based newspaper *La Región*, interview by author, 17 August 2022, Iquitos.
14 Calampa, interview.

distribution of medical equipment: PPE, medicines, oxygen and other supplies sent to Loreto by the Ministry of Health' during the first wave (*Pro y Contra*, 2020f).

This ruthless commodification of every dimension of a catastrophic pandemic was not an aberration but a direct expression of the logic of cannibal capitalism. There is a sense in which the clandestine oxygen market was not really an illicit market at all but simply a free market operating in strict accordance with the neoliberal logic enshrined in the Peruvian constitution, which prohibits the governmental imposition of price controls (Fernández, 2020). And the distortion of this market by instances of theft and corruption was also entirely consistent with the logic of the mafia state with which Peruvian neoliberalism had symbiotically evolved. There was even a clandestine market in private ambulance flights to Lima for those who could afford them, in a context in which all commercial flights had been grounded. A cardiologist recalled the case of one of his wealthy private patients—an executive at the state oil company. His oxygen saturation level was dangerously low, and when he mentioned that a flight of this kind might be an option, the cardiologist advised him to take it in order to gain access to an intensive care unit (ICU) in one of Lima's exclusive private hospitals:

> I told him, 'You need to be in a hospital, because you need to be on a ventilator'. [He said], 'Carlos, but I can see that here in the hospitals there isn't even any oxygen [let alone any ventilators]. I want to go to Lima, but there are no flights. But my son is well connected. I'm going to pay 50,000 soles for a plane to come and take me'. 'OK', I told him, 'If that's a possibility for you, then do it' … He never returned. He died in Lima … There are many stories like that. I had another patient, the owner of a fleet of oil barges, and he also commissioned a [private ambulance] plane from Lima and was hospitalized there, and he survived.

'That service was only for the super-elite of Iquitos?' I asked the cardiologist. 'Of course', he replied. 'And the poor?' I asked. He paused, then repeated the same phrase, more quietly each time: 'They died. They died. They all died. They all died. They all died'.[15]

The pandemic on the peripheries of the cannibal metropolis

At the height of the first wave of Covid-19 in Iquitos, in the final week of April and the first fortnight of May, the city centre finally fell silent as its terrified inhabitants at last adhered to lockdown. But the scene was very different in the informal settlements that surround the city. Here life seemingly continued more or less as usual. An inhabitant of a settlement on the southern outskirts of Iquitos reported that in his barrio 'people just got on with their lives … They played volleyball every afternoon throughout the entire pandemic. They played football all the time. When the police arrived … everyone dropped the ball and zoom!—into their houses, through doors and windows. And back they came 10 minutes later.'[16] This spatial division was an expression of the class relations of Iquitos which the pandemic had thrown into brutal relief. As we have seen, the persistent refusal of the city's impoverished majority to comply with the lockdown was primarily a consequence of economic necessity. But it was also due to this predominantly Indigenous population's distrust of draconian regulations imposed by a state that had always treated them with contempt.[17] This distrust was further justified by the circumstances facing them at the time, as their incapacity to exercise effective demand in the clandestine oxygen and medicine markets excluded them from the possibility of medical treatment, and by implication from the hospitals themselves.

15 Dávila, interview.
16 Inhabitant of an informal settlement, interview.
17 Miguel Cadenas, bishop of Iquitos, interview by author, 3 October 2022, Iquitos.

As the pandemic reached its peak in Iquitos, the wave of middle-class deaths in the hospitals of the city thus collided with a far less reported wave of deaths of the poor in the streets and in their homes.[18] The corpses had to be collected from where they lay and transported to the hospitals, creating an additional challenge for a disintegrating health system and adding further pressure to the overflowing morgues, which had nowhere to dispose of the dead due to the saturation of the private cemeteries and the breakdown of the overworked incinerator in the city's only crematorium. In the absence of other alternatives for their storage, the Regional Health Directorate (DIRESA) commandeered a refrigeration unit on the southern edge of the city. Faced with the mass desertion of their staff, DIRESA hired 'Humanitarian Brigades' to collect corpses from homes and streets and transport them to the unit, along with those who had died in the hospitals. In addition, DIRESA acquired a piece of land 18 kilometres outside Iquitos, along the highway that ran past the site of the refrigeration unit and was the only road out of the city. Once the land had been prepared, vehicles began transferring the bodies from the unit to this place, which was officially denominated the 'Covid cemetery'.[19]

The task of recruiting the Humanitarian Brigades fell to the GOREL general manager Roberto Danilo Tello, who had assumed the reins of government following Ochoa's effective abandonment of his office. By this point, as Tello explained, 'the whole world was afraid of dying', and homeless addicts of cocaine paste (the base from which cocaine is refined) were among the few people willing to collect the corpses, in exchange for a day rate plus food:

> The scale [of the task] was huge, and the enemy was even greater. So on many occasions we contracted people who were living on the streets—drug addicts … I told them, 'Look, I'm going to pay you, and you are going to have a secure income … [But] you're going to have to retrieve patients, people who have died in their homes'. They told me, 'Yeah ok, that's fine, no problem' … I suppose they must have been afraid. But they overcame their fear … [They even worked] while they ate! Eating their hamburgers! That was surreal … One day I left the government [headquarters] at half past six in the evening. It was a gloomy sunset, like you see in the movies, with armed soldiers on the streets, a dismal atmosphere … And suddenly the convoy passed—the caravan that took the dead of the day … And by then it was so routine for those kids to be transporting those cadavers … that they went by sitting on top of the corpses, eating [their hamburgers]! On their way to the cemetery to bury the dead.

By this point in the pandemic, as Tello's testimony indicates, the bodies were being taken straight to the Covid cemetery, instead of being held temporarily in the refrigeration unit on the outskirts of the city. This was due to a series of blockades launched by inhabitants of the settlements surrounding the facility containing the refrigeration unit. They repeatedly barricaded the highway with scrap metal and burning tyres, which resulted in violent confrontations with riot police firing tear gas and making multiple arrests. The protesters feared contagion after seeing cadavers in black garbage bags arriving on pickup trucks and being unloaded by people in hazmat suits, and complained that the refrigeration unit had broken down and that the stench of decomposing corpses filled the air. One woman living next door to the facility claimed that she could also hear the voices of the dead:

18 The overall death rate in Iquitos during this period is unknown, as the death certification process had broken down along with the rest of the health system. There were also reports of people bribing health officials to record alternative causes of death for family members, as wakes were prohibited for Covid deaths. And on the peripheries of the city, many are believed to have buried their dead in secret (Silva-Valencia *et al*., 2021).

19 Elvis Sandoval, director of environmental health at DIRESA, interview by author, 25 July 2022, Iquitos.

> How the dead mourned! We could hear them mourning, we could hear them walking. Women who died while pregnant mourned, and the babies who died in their stomachs cried … There was a time when the sky turned black. Pitch-black were the clouds. They said it was the spirits of the people mourning their deaths. The clouds turned black, as if it were about to rain. But it never rained. That's why we believe it was the spirits of the people who had died.[20]

The Covid cemetery to which the bodies were transferred in the middle of the night was really a mass grave carved into the jungle out of sight from the main road. Many of the corpses had been taken there without their families being informed, following their secret removal from the hospital morgues. The grave was operated by a private company contracted by DIRESA, which worked all night under floodlights powered by a diesel generator. In contrast to the 'model of an ecological cemetery' that DIRESA subsequently claimed to have been following,[21] witnesses described a brutal and chaotic process in which excavators shovelled up the corpses and dropped them into a pit, after which the pit was filled and the ground flattened without any demarcation of the bodies (Briceño, 2021; *Wayka*, 2021). On the peripheries of Iquitos, such reports resonated with the perceived treatment of the poor during the pandemic—and indeed throughout the history of the city and its extractive hinterlands. In the words of one inhabitant of an informal settlement, 'They threw the dead away like animals'.[22] A neighbour of hers agreed: 'Like animals they threw them away beside the road'.[23]

Uncle Covid

On 26 April 2020, just as the Covid cemetery was beginning its operations, Juan Pablo Vaquero was pronounced dead at the Regional Hospital and his body disappeared. But as discussed in the opening passage of this article, the man who came to be known as Uncle Covid reappeared at his sister's home three days later, claiming to have awoken on top of a pile of bodies wrapped in black plastic bags.[24] Medical staff and state functionaries mocked the story as a 'comical' fabrication.[25] But for the subaltern inhabitants of Iquitos, Uncle Covid's predicament appeared as an extreme manifestation of the necropolitics of abandonment and disregard to which the poor of the city had been subjected throughout the pandemic, and his defiant resurrection was interpreted as an act of rebellion. According to one inhabitant of an informal settlement, 'There was a man who they said had died of Covid. They dug a hole with a tractor to dump the bodies … and they left him there … They left him for dead. But the man revived! He emerged covered in maggots (*puros gusanos su cuerpo*) and returned to his family!'[26] I visited Vaquero's sister, who explained that he had moved away from Iquitos as a consequence of his experience and would no longer speak about his story. But she agreed to do so in his absence. Her testimony winds its way back through the gothic sociospatial labyrinth of Iquitos under Covid-19 described in the previous sections of this article, as experienced by a single subaltern inhabitant of the city.[27]

20 Woman living on the outskirts of Iquitos, interview by author, 9 August 2022, Iquitos.
21 Sandoval, interview.
22 Inhabitant of the informal settlement of Iván Vásquez, interview by author, 11 May 2023, Iquitos.
23 Community leader of Iván Vásquez, interview by author, 5 October 2022, Iquitos.
24 At this stage, according to several testimonies, the bodies were dumped at the entrance to the Covid cemetery, where they accumulated prior to the digging of the trenches in which the burials began a few days later. This is consistent with Vaquero's account of awakening in a pile of unburied corpses.
25 Employee of DIRESA, interview by author, 26 July 2022, Iquitos.
26 Community leader of Iván Vásquez, interview.
27 I interviewed Juan Pablo Vaquero's sister at her home in Iquitos on 5 August 2022. Since then, a Peruvian oral history project on the pandemic has published a book including her testimony, along with a filmed interview (Relatos en Pandemia, 2022; Britto Palacios and Roeder Carbo, 2023: 38–45). I have drawn on these sources here, in addition to my own notes.

'The pandemic was not an easy thing for us', she began. One night, as was usual at this time, she got up at 1 am to make her daily journey to a market on the banks of Nanay River, where she bought the fish and plantain that she cooked over charcoal to sell from her front door every morning. Normally she got up at 4 or 5 am to buy her fish, but like other peripheral markets under lockdown, the market on the Nanay was now operating nocturnally to evade the patrols. She had to walk a long way to find clandestine transport under curfew, and the journey thus took far longer than normal. She got home at 5 am or so with her fish, just before the first police patrol came by, and found her brother lying on the floor. He was stretched out rigidly with his hands clasped over his chest, and he was trembling and bleeding from the nose. She thought, 'Oh my God, my brother is dying'. She took him to the Regional Hospital, where he was examined while she waited in the corridor with a multitude of Covid patients and their family members: 'At that moment in the pandemic the people died like animals', she said. 'They were dying all around me like chickens with the plague'. She watched as hospital staff wrapped their bodies in black plastic and 'carried them away like garbage'.

Eventually a doctor emerged and asked her to sign some forms. In her panic and exhaustion, the words seemed to slide across the page. The doctor told her not to worry about what the forms said but to sign at the bottom of each and add her national ID number, and she did so without reading them. Early the following morning, another doctor injected her brother with a syringe filled with a white liquid and sent her to the pharmacy with a prescription. As she was returning, she could see hospital workers wheeling her brother away down the corridor. She ran after them and asked where they were taking him. One of them stopped and told her: '*Señora*, your brother has departed (*ya se fue*). You need to go home. It's dangerous here'. Meanwhile her brother had disappeared into the chaos of the hospital, and no one would tell her where he was. She waited there all day trying to find out what had happened to his body, along with many other people making similar enquires. She was repeatedly told that her brother had passed away, but she was not provided with a death certificate.[28]

She finally returned home that evening, where her family told her to accept that her brother had died. She mourned him for the next two days, before economic circumstances forced her to return to work. As she was preparing to make her first journey to the nocturnal market since his accident, one of her neighbours shouted in alarm that her brother was at the door. She opened it and he was standing there with a strange look on his face—a kind of twisted sidelong gaze. His clothes were filthy and covered in mud, and he stank of death. Her neighbours and her family told her not to let him in. Everyone was afraid. But she brought him in and bathed him. 'Where were you, brother?' she asked him. 'I was out on the highway in a garbage dump', he replied. 'And what were you doing there?' she asked. 'I don't know', he said. 'I woke up in the trash, on top of a pile of black bags'. 'Who put you there?' she persisted. 'I don't know', he said again. She now believes that the doctors had tried to murder him with the injection of white fluid they had administered after making her sign the forms that she had not understood, and then had wrapped him in a garbage bag and dispatched him to the mass grave. Her brother has since moved to a city on the Marañón River at the far end of the highway. When he left Iquitos, he told her: 'I'm going to the Marañón. Here they threw me away like I was dead. I'm going to die in [the region of] the Marañón. There they will bury me in a coffin'.

Conclusion

This article has presented a surrealist urban political ecology of cannibal capitalism in the zoonotic city through the case of Covid-19 in Iquitos, which research suggests was the world's worst-hit city during the first wave of the pandemic. By the

28 Despite his subsequent nickname of Uncle Covid, Juan Pablo Vaquero had no symptoms of Covid-19, and according to his sister the doctor who examined him suggested that his condition had been caused by a stroke.

time this wave was coming to an end in July 2020, 70% of the Iquitos population had contracted Covid-19, and records suggest that more than 2,500 of its inhabitants had died from the disease, with the true number acknowledged to have been significantly higher (Álvarez-Antonio *et al*., 2021). As we have seen, the severity of the pandemic in Iquitos can largely be explained in terms of the city's paradigmatic manifestation of multiple dimensions of zoonotic urbanization. Despite being the largest city in the world with no road access, the integration of Iquitos into rapid planetary flows of human beings through its airport ensured the swift arrival of the virus (Orford *et al*., 2023). This was preceded by the unregulated peripheral expansion of informal settlements into the surrounding jungle in the absence of water and sewage systems (Connolly *et al*., 2021), which had contributed to twin epidemics of dengue and leptospirosis that had brought the health system to the brink of collapse immediately before Covid-19 arrived. The weakness of this system was largely due to decades of chronic underinvestment and institutional fragmentation enforced through multiscalar processes of neoliberalization (Brenner and Ghosh, 2022), which found concrete urban expression in the crumbling hospitals and other social infrastructures of Iquitos. And the rapid propagation of the virus was a consequence of the practical inability of the majority of the population to adhere to lockdown regulations in the context of the widespread informal employment, overcrowded housing and entrenched forms of poverty and inequality characteristic of the zoonotic city (Wolf, 2016; Gandy, 2022; 2023; McFarlane, 2023; Keil *et al*., 2024).

In all these respects, Iquitos embodies the defining characteristics of the zoonotic city identified in the urban political ecology literature on this theme. But these characteristics do not fully explain the severity of the pandemic in this case, which was largely a consequence and expression of cannibal capitalism—an emergent form of capital accumulation that devours the social and ecological basis of its own reproduction and erodes the rationalizing institutions of the state (Fraser, 2022). In Iquitos, cannibal capitalism found its ultimate expression in the clandestine oxygen market that flourished during the pandemic, a quintessential example of the 'gore marketplace' in which 'the products and services offered [and withheld] are those associated with necropower and necropractices' (Valencia, 2018: 141). Rather than seeking to eradicate or regulate this market, the regional government played a central role in the market itself—and in parallel markets in medicines and other medical supplies. This was not only a means of personal enrichment but also a way to repay campaign debts to the criminal networks in which the government itself was embedded. This systemically corrupt fusion of state, capital and organized crime in the necropolitical distribution of life and death—the defining feature of gore capitalism as a modality of cannibal capitalism—was far from being limited to Iquitos. Criminal gangs played prominent roles in pandemic responses in multiple cities around the world, including Nairobi, Cape Town, San Salvador and Rio de Janeiro (Sampaio, 2021); corruption was equally widespread in supposedly advanced economies such as the UK (Knox and White, 2023); entrenched inequality assumed similarly necropolitical manifestations in India (Jagannathan and Rai, 2022); and illicit markets in oxygen subsequently emerged in other cities in Peru (Lust, 2023).

Above all other contributing factors, it was the chronic scarcity of medicinal oxygen—and the corresponding prices imposed by the clandestine market—that led to the enormous death rate in Iquitos, as those without the economic means and personal connections to secure adequate oxygen perished from infections that they would otherwise have survived. This 'mortal feast' exposed the ruthless class relations of cannibal capitalism as the elites escaped to private ICUs in Lima on clandestine chartered flights; the middle classes burned through their savings in desperate searches for illicit oxygen in the deserted city centre; and those excluded from the oxygen market died in their homes on the peripheries of the city while everyday life continued on the dirt streets outside because the subaltern could not afford to stop. The market in oxygen was ultimately a market in life itself—a form of accumulation by dispossession

in which the financial resources of those capable of exercising effective demand were transferred to economic and political mafias in exchange for the temporary provision of the possibility of survival. But the resulting distribution of life and death was less a deliberate operation of sovereign power on the part of these criminal elites than an abstract expression of the price mechanism, demonstrating the need for 'a materialist account of necropolitics: one that allows us to see value and the reproduction of capitalism as intimately connected to biopolitical decisions' (Knox and White, 2023: 331).

The case of Covid-19 in Iquitos thus suggests that our understanding of the urban political ecology of the zoonotic city can be enriched through a deeper appreciation of its infusion with the logic of cannibal capitalism, the necropolitical operations of which are captured by the closely related concept of gore capitalism. As Fraser notes in her formulation of cannibal capitalism, this logic is 'ripe with irrationality' (Fraser, 2022: 134). But this irrational dimension tends to recede from view in much of the literature on the zoonotic city—and indeed in Fraser's own systematic formulation. This disappearance is due to the adherence of the majority of this literature to the normalizing conventions of academic sense-making, which edit out incongruencies, elucidate perplexities and retrospectively project a greater degree of explanatory coherence onto social reality than it in fact possesses. What is lost in this process, I would argue, is not just the irrelevant aspects of our research findings but essential elements of the social reality of cannibal capitalism, given that 'the reality at stake here makes a mockery of understanding and derides rationality' (Taussig, 1987: 9).

The surreal qualities of this social reality are by no means limited to the peculiarities of the coronavirus pandemic but increasingly characterize the Anthropocene as a whole, provoking diverse assertions of the need for theoretical, methodological and stylistic experimentation in the fields of urban and cultural geography (see, e.g. Daniels and Lorimer, 2012; Hill, 2013; Wakefield, 2022). I have explored the contributions that surrealism can make to this project in greater depth elsewhere (Wilson, 2022a; 2023b; 2024). In this article I have sought to loosen the grip of our sense-making mechanisms through the relatively limited deployment of an *ethnographic* surrealism, in response to calls for such experimental methods in the literature on zoonotic urbanization (Wolf, 2016; Gandy, 2023). In contrast to the customary academic 'blending of the work's raw "data" into a homogenous representation' (Clifford, 1981: 563), this approach has led to the inclusion of multiple heterogeneous elements that go unmentioned in more conventional accounts of the pandemic in Iquitos (see, e.g. Álvarez-Antonio *et al*., 2021; Silva-Valencia *et al*., 2021). Their incorporation serves to convey the simultaneous dissolution of the structures of institutional and psychological space experienced at the time, revealing the bewildering chaos, grotesque absurdity and gothic horror of the collision between cannibal capitalism and Covid-19 in the zoonotic city.

These elements include the testimonies of institutional disintegration and mass death in the hospitals; the story of cocaine paste addicts-turned-undertakers eating hamburgers while seated on corpses; and the report of spectral manifestations of the Covid dead. But the most significant element in this regard is undoubtedly the case of Juan Pablo Vaquero, or 'Uncle Covid'. As in other cases of the apparent collapse of the division between fantasy and reality discussed in the article, I have here refrained from seeking to establish the 'truth' or 'falsity' of the events described—not as an embrace of relativism or an escape into fabulation, but because such a search would obscure the deeper truths at stake. Perhaps Juan Pablo Vaquero was not almost buried alive in the Covid cemetery, and perhaps doctors in the Regional Hospital did not try to murder him. But seeking to establish such reassuringly rational and definitive positions on these matters would contribute to the erasure of the lived experience of radical indeterminacy through which such popular beliefs could take hold, which tells its own truth of everyday

life under cannibal capitalism.[29] Such a search would also detract from the fact that 'Uncle Covid' assumed such a mythical status in the collective imaginary of Iquitos precisely because the story conveyed the dehumanization characteristic of cannibal capitalism and symbolized the stubborn survival of the subaltern inhabitants of the city against all odds. The revelation of such repressed truths is a central objective of surrealist method, which actively participates in the deconstruction of socially sanctioned meaning in order to open a space in which 'what we wanted to hide, and what we weren't aware of hiding from ourselves, keenly develops a taste for light' (Dalí, 1998: 64).

In this sense, the story of Uncle Covid plays a role in the collective memory of Iquitos similar to that played by zombie movies in Western consumer culture under conditions of combined and uneven apocalypse: 'What is apocalyptic about the walking dead is what they reveal about the conditions of the *living*, all those deep, rutted grooves of antagonism and violence seething beneath daily life' (Calder Williams, 2011: 84). This reference to the undead raises a further uncomfortable truth, which was also communicated by the story of Uncle Covid albeit in a more oblique form. As the first wave drew to a close, there was a widespread consensus in Iquitos that the realities that it had revealed must catalyse radical political change. In the words of two Catholic priests working in the city, 'This pandemic has brought all our flaws to light. The decomposition of society in Loreto is terrible. Misrule and corruption work for death' (Berjón and Cadenas, 2020). A similar consensus emerged at the global scale, as prominent critical scholars around the world agreed that there could be no return to so-called normality in the face of the planetary socioecological breakdown of which the pandemic was a harbinger and for which it had served as an urgent warning (Latour, 2020; Mbembe, 2021; Žižek, 2021). And yet cannibal capitalism has since reconstituted itself and has continued to accelerate along the same apocalyptic trajectory as 'pronounced Anthropocenic signatures [persistently] intersect with a necrotic urban governance to further jeopardise the lives of those already at the margins' (Kimari, 2024: 159). In Iquitos, as elsewhere, the same political and economic structures remain hegemonic. Illegal extractive industries continue to operate with impunity, and no one has been prosecuted for the multiple well-documented cases of corruption that occurred during the first wave of the pandemic. And when the second wave hit, in January 2021, the entire cycle began again, complete with collapsing hospitals and the re-emergence of the clandestine oxygen market (*Pro y Contra*, 2021).[30] In this context, the mythical figure of Uncle Covid not only embodies the suffering caused by cannibal capitalism but also resonates with the death drive of cannibal capitalism itself: the blind repetitive urge towards endless accumulation regardless of all social and ecological limits; a demented anthropophagous system that not only kills but also refuses to die (Calder Williams, 2011; Pohl and Tomšič, 2021; Ware, 2023). Like Uncle Covid, cannibal capitalism tears through the corpses and stumbles on down the highway.

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29 The systematic privileging of certain 'epidemic narratives' over others is not simply an objective reflection of factual accuracy but is an expression of unequal power relations that limits our understanding by providing 'only narrow, partial perspectives on the dynamics and experiences associated with epidemics … Not incidentally, the perspectives of people living with disease are often neglected' (Leach and Dry, 2010: 6).

30 Towards the end of the first wave in Iquitos, an initiative organized by the local Catholic church succeeded in rapidly raising the funds for the purchase of an oxygen plant, which was installed in the Regional Hospital. People from all sectors and social classes contributed to the fund, and the initiative was widely celebrated at the time as a symbol of the grassroots solidarity through which the city might be transformed in the effective absence of the state. The plant, however, did not function properly and was beset by controversies. Further fundraising allowed the church to install two additional plants in the city. But their impact was limited, as demonstrated by the return of the illicit oxygen market during the second wave (Britto Palacios and Roeder Carbo, 2023).

References

Aguirre, A. (2019) Gobernador de Loreto es vinculado a un clan de narcotráfico en Iquitos [Governor of Loreto is connected to a narcotrafficking clan in Iquitos]. *Perú 21*, 25 March [WWW document]. URL https://peru21.pe/politica/gobernador-loreto-vinculado-clan-narcotrafico-iquitos-467692-noticia/ (accessed 18 June 2024).

Álvarez-Antonio, C., G. Meza-Sánchez, C. Calampa, W. Casanova, C. Carey, F. Alava, H. Rodríguez-Ferrucci and A.M. Quispe (2021) Seroprevalence of anti-SARS-CoV-2 antibodies in Iquitos, Peru in July and August, 2020: a population-based study. *The Lancet* 9 (July), 925–31.

Berjón, M. and M. Cadenas (2020) Morir y contar en Kukama en medio de la pandemia [Dying and storytelling in Kukama in the midst of the pandemic]. *La Candela del Ojo*, 27 May [WWW document]. URL https://lacandeladelojo.blogspot.com/2020/05/morir-y-contar-en-kukama-en-medio-de-la.html (accessed 18 June 2024).

Brenner, N. and S. Ghosh (2022) Between the colossal and the catastrophic: planetary urbanization and the political ecologies of infectious diseases. *Environment and Planning A: Economy and Space* 54.5, 867–910.

Briceño, F. (2021) In Peru, authorities allowed secret burials of virus victims. *AP News*, 8 April [WWW document]. URL https://apnews.com/article/latin-america-coronavirus-pandemic-peru-d642e0762796cd490f0ce8d819d3eeea (accessed 18 June 2024).

Britto Palacios, F. and E. Roeder Carbo (2023) *Iquitos: la primera ciudad en caer* [Iquitos: the first city to fall]. ComunicArte Perú, Lima.

Calder Williams, E. (2011) *Combined and uneven apocalypse*. Zero Books, Winchester.

Cameron, M.A., V. Hurtado, P. Sosa Villagarcia and M. Gombata (2023) A tale of two crashes: pandemic politics in Brazil and Peru. *Latin American Perspectives* 50.4, 248–67.

Chenet, Stella M. and R. Tapia-Limonchi (2021) Reaching the theoretical herd immunity threshold in Iquitos, Peru: are seroprevalence data enough? *The Lancet Global Health* 9.7, e881-e882.

Chirif, A. (2020) Por qué los Iquiteños no permanecen en casa? [Why don't Iquiteños stay home?] *Servindi*, 1 June [WWW document]. URL https://www.servindi.org/actualidad-opinion/01/06/2020/por-que-los-iquitenos-no-permanecen-en-casa (accessed 18 June 2024).

Clifford, J. (1981) On ethnographic surrealism. *Comparative Studies in Society and History* 23.4, 539–64.

Collyns, D. (2020) 'We are living in a catastrophe': Peru's jungle capital choking for breath as Covid-19 hits. *The Guardian*, 7 May [WWW document]. URL https://www.theguardian.com/global-development/2020/may/07/peru-jungle-iquitos-coronavirus-covid-19 (accessed 18 June 2024).

Conley, K. and A. Mahon (2024) Inside/outside: surrealism in the time of Covid. *International Journal of Surrealism* 1.2, vii–ix.

Connolly, C., R. Keil and S. Harris Ali (2021) Extended urbanisation and the spatialities of infectious disease: demographic change, infrastructure and governance. *Urban Studies* 58.2, 245–63.

Crabtree, J. and F. Durand (2017) *Peru: elite power and political capture*. Zed Books, London.

Dalí, S. (1998) *Oui: the paranoid-critical revolution writings 1927–1933*. Exact Change, Boston.

Daniels, S. and H. Lorimer (2012) Until the end of days: narrating landscape and environment. *cultural geographies* 19.1, 3–9.

Dinegro Martínez, A. (2020) Peru passes coronavirus risk to the working class. *Nacla*, 19 May [WWW document]. URL https://nacla.org/news/2020/05/19/peru-coronavirus-working-class (accessed 18 June 2024).

Fernández, Z. (2020) Iquitos: cobran hasta S/3800 por balón de oxígeno para pacientes con Covid-19 [Iquitos: patients with Covid-19 charged up to 3,000 soles for a tank of oxygen]. *Wayka*, 30 April [WWW document]. URL https://wayka.pe/iquitos-cobran-hasta-s-3-800-por-balon-de-oxigeno-para-pacientes-con-covid-19/ (accessed 18 June 2024).

Fraser, B. (2020) Coronavirus en Loreto: reportes identifican nueve veces más muertes que cifras oficiales [Coronavirus in Loreto: reports identify nine times more deaths than the official figures]. *Wayka*, 14 May [WWW document]. URL https://ojo-publico.com/edicion-regional/loreto-nueve-veces-mas-muertes-por-covid-19-que-cifras-oficiales (accessed 18 June 2024).

Fraser, N. (2022) *Cannibal capitalism: how our system is devouring democracy, care, and the planet—and what we can do about it*. Verso, London.

Gandy, M. (2022) The zoonotic city: urban political ecology and the pandemic imaginary. *International Journal of Urban and Regional Research* 46.2, 202–19.

Gandy, M. (2023) Zoonotic urbanisation: multispecies urbanism and the rescaling of urban epistemology. *Urban Studies* 60.1, 2529–49.

Gianella, C., J. Gideon and M.J. Romero (2021) What does Covid-19 tell us about the Peruvian health system? *Canadian Journal of Development Studies* 42.1/2, 55–67.

Gonda, N., N. Leder, M. González-Hidalgo, L. Chiwona-Karltun, A. Stiernström, F. Hajdu, K. Fischer, I. Asztalos Morell, A. Kadfak and A. Arvidsson (2021) Critical reflexivity in political ecology research: how can the Covid-19 pandemic transform us into *better* researchers? *Frontiers in Human Dynamics* 3, 1–16.

Grandez Rios, R. (2020) Loreto y su pandemia 2020 [Loreto and its pandemic 2020]. *Prospectiva Amazónica* 427, 1–25.

The Guardian (2021) Peru has world's worst per capita death toll after death data revised. 1 June [WWW document]. URL https://www.theguardian.com/world/2021/jun/01/peru-has-worlds-worst-per-capita-covid-toll-after-death-data-revised (accessed 18 June 2024).

He, D., L. Lin, Y. Artzy-Randrup and L. Stone (2023) Resolving the enigma of Iquitos and Manaus: a modelling analysis of multiple Covid-19 epidemic waves in two Amazonian cities. *PNAS* 120.10, 1–9.

Hidalgo, C. (2020) El sistema de salud de Loreto colapsó [The health system in Loreto has collapsed]. *Cuarto Poder*, 11 May [WWW document]. URL https://www.youtube.com/watch?v=YktDkhADx6c&ab_channel=Am%C3%A9ricaNoticias (accessed 18 June 2024).

Hill, L. (2013) Archaeologies and geographies of the post-industrial past: landscape, memory and the spectral. *cultural geographies* 20.3, 379–96.

Jagannathan, S. and R. Rai (2022) The necropolitics of neoliberal state responses to the Covid-19 pandemic in India. *Organization* 29.3, 426–48.

Keil, R., S. Harris Ali and S. Treffers (2024) Extending the boundaries of 'urban society': the urban political ecologies and pathologies of Ebola virus disease in West Africa. In M. Kaika, R. Keil, T. Mandler and Y. Tzaninis (eds.), *Turning up the heat: urban political ecology for a climate emergency*, Manchester University Press, Manchester.

Kimari, W. (2024) Nairobi's bad natures. In M. Kaika, R. Keil, T. Mandler and Y. Tzaninis (eds.), *Turning up the heat: urban political ecology for a climate emergency*, Manchester University Press, Manchester.

Knox, R. and D. Whyte (2023) Vaccinating capitalism: racialised value in the Covid-19 economy. *Mortality* 28.2, 329–45.

La Región. 2019a. Alerta roja: Loreto sigue registrando más muertes por leptospirosis [Red alert: Loreto keeps registering more deaths from leptospirosis]. 30 December [WWW document]. URL https://diariolaregion.com/alerta-roja-loreto-sigue-registrando-mas-muertes-por-leptospira (accessed 1 November 2024).

La Región. 2019b. Continúa calvario en área de hemodiálisis del Hospital Regional [Ordeal continues in the hemodialysis area of the Regional Hospital]. 18 December.

Latour, B. (2020) What protective measures can you think of so we don't go back to the pre-crisis production

model? [WWW document]. URL http://www.bruno-latour.fr/node/853.html (accessed 18 June 2024).
Leach, M. and S. Dry (2010) Epidemic narratives. In M. Leach and S. Dry (eds.), *Epidemics: science, governance and social justice*, Routledge, Abingdon.
Lust, J. (2022) The structural conditions for the expansion of Covid-19 in Peru. In Z. Boutsioli, V. Bigelow and O. Gkounta (eds.), *Essays on Covid-19 research*, Atiner, Athens.
Lust, J. (2023) The Peruvian state and Covid-19. *Latin American Perspectives* 50.4, 122–38.
Lusty, N. (2017) Rethinking historiography and ethnography: surrealism's intellectual legacy. *Intellectual History Review* 27.3, 405–18.
Mbembe, A. (2003) Necropolitics. *Public Culture* 15.1, 11–40.
Mbembe, A. (2021) The universal right to breathe. *Critical Inquiry* 47, 58–62.
McFarlane, C. (2023) Repopulating density: Covid-19 and the politics of urban value. *Urban Studies* 60.9, 1548–69.
Ministerio Público (2020) Investigaciones por presuntos hechos de corrupción comprometen a 19 gobernadores regionales [Investigations into alleged acts of corruption implicate 19 regional governors]. 9 December [WWW document]. URL https://www.gob.pe/institucion/mpfn/noticias/319925-investigaciones-por-presuntos-hechos-de-corrupcion-comprometen-a-19-gobernadores-regionales (accessed 18 June 2024).
Nájar, F. (1991) Cifras escalofriantes [Chilling figures]. *Kanatari* (12 May).
Nájar, F. (2004) Habían llegado la leishmaniasis, hepatitis B, cólera, malaria, dengue, y ahora, señoras y señores, con nosotros … la leptospirosis [We've had leishmaniasis, hepatitis B, cholera, malaria, and dengue, and now, ladies and gentlemen, we have … leptospirosis]. *Kanatari* 1026 (16 May), 416–18.
O'Connell, M. (2020) Why we are living in JG Ballard's world. *New Statesman*, 1 April [WWW document]. URLhttps://www.newstatesman.com/long-reads/2020/04/why-we-are-living-jg-ballard-s-world (accessed 18 June 2024).
Orford, S., Y. Fan and P. Hubbard (2023) Urban public health emergencies and the Covid-19 pandemic. Part 1: social and spatial inequalities in the Covid city. *Urban Studies* 60.8, 1329–45.
Pohl, L. and S. Tomšič (2021) The catastrophic drive. In E. T. Harper and D. Specht (eds.), *Imagining apocalyptic politics in the Anthropocene*, Routledge, Abingdon.
Pro y Contra (2020a) Ciudadanos recogieron víveres de la basura [Citizens collected groceries from the garbage]. 16 April [WWW document]. URL https://proycontra.com.pe/ciudadanos-recogieron-viveres-de-la-basura/ (accessed 18 June 2024).
Pro y Contra (2020b) Encuentran medicinas de DIREMID en una casa [DIREMID medicines found in a house]. 22 May [WWW document]. URL https://proycontra.com.pe/encuentran-medicinas-de-diremid-en-una-casa/ (accessed 18 June 2024).
Pro y Contra (2020c) Ha sido un acto delincuencial [It was a criminal act]. 12 April [WWW document]. URL https://proycontra.com.pe/ha-sido-un-acto-delincuencial/ (accessed 18 June 2024).
Pro y Contra (2020d) Nadie organiza las cosas y pobladores se desesperan [No one is organizing things and people are getting desperate]. 14 April [WWW document]. URL https://proycontra.com.pe/nadie-organiza-las-cosas-y-pobladores-se-desesperan/ (accessed 18 June 2024).
Pro y Contra (2020e) No lucré con la venta de paracetamol [I did not profit from the sale of paracetamol]. 7 May [WWW document]. URL https://proycontra.com.pe/no-lucre-con-la-venta-de-paracetamol/ (accessed 18 June 2024).
Pro y Contra (2020f) Queremos saber cómo se gastó la plata [We want to know how they spent the cash]. 25 June [WWW document]. URL https://proycontra.com.pe/queremos-conocer-como-se-gasto-la-plata/ (accessed 18 June 2024).
Pro y Contra (2021) No aprendimos nada de una trágica pandemia [We learned nothing from a tragic pandemic]. 11 February [WWW document]. URL https://proycontra.com.pe/no-aprendimos-nada-de-una-tragica-pandemia/ (accessed 18 June 2024).
Ramos Tenazoa, L.F. (2019) Pronunciamiento [Pronouncement]. *La Región*, 18 December.
Relatos en Pandemia (2022) Sra. Purificación Chota [Mrs. Purificación Chota]. 14 October [WWW document]. URL https://www.youtube.com/watch?v=wQJeEqikb6U (accessed 18 June 2024).
Sampaio, A (2021) *Criminal governance during the pandemic: a comparative study of five cities*. Global Initiative Against Organized Crime, Geneva.
Santos Granero, F. and F. Barclay (2015) *La frontera domesticada: historia económica y social de Loreto 1850–2000* [The domesticated frontier: an economic and social history of Loreto 1850–2000]. Second edition, Tierra Nueva, Iquitos.
Schwalb, A. and C. Seas (2021) The Covid-19 pandemic in Peru: what went wrong? *American Journal of Tropical Medicine and Hygiene* 104.4, 1176–78.
Silva-Valencia, J., T. Adair, J. Hart, G. Meza and J. Vargas Herrera (2021) How has Covid-19 impacted the civil registration and vital statistics system in Loreto, Perú? Evidence using process mapping and qualitative analysis. *BMJ Open* 11, 1–11.
Sloan, S.M. (2020) Behind the 'curve': Covid-19, infodemic, and oral history. *The Oral History Review* 47.2, 193–202.
Tafur Rengifo, L. (2008) Hospital Regional: caos, temor y deterioro [Regional Hospital: chaos, fear and deterioration]. *Kanatari* 1230 (13 April), 3972–73.
Taussig, M. (1987) *Shamanism, colonialism, and the wild man: a study in terror and healing*. University of Chicago Press, Chicago, IL.
Taussig, M. (2021) Would a shaman help? *Critical Inquiry* 47, 33–6.
Valencia, S. (2018) *Gore capitalism*. MIT Press, Cambridge, MA.
Varón, R. and C. Maza (eds.) (2014) *Iquitos*. Telefónica, Lima.
Vásquez Valcárcel, J. (1991) Las autoridades en los tiempos de la cólera [The authorities in times of cholera]. *Kanatari* (7 April), 6–7.
Ventkatesan, S. and I.A. Joshi (2022) 'The time is out of joint': temporality, Covid-19 and graphic medicine. *Medical Humanities* 48.4, 15–21.
Wakefield, S. (2022) Critical urban theory in the Anthropocene. *Urban Studies* 59.5, 917–36.
Ware, B. (2023) The death drive at the end of the world. *e-flux* 134, 1–13.
Wayka (2021) Loreto: Autoridades entierran en secreto cuerpos de pacientes Covid en fosas comunes [Loreto: authorities secretly bury bodies of Covid patients in mass graves]. 9 April [WWW document]. URL https://wayka.pe/loreto-autoridades-entierran-en-secreto-cuerpos-de-pacientes-covid-en-fosas-comunes/ (accessed 18 June 2024).
Wilson, J. (2022a) The rotting city: surrealist arts of noticing the urban Anthropocene. *Space and Culture.* https://doi.org/10.1177/12063312231159202.
Wilson, J. (2022b) We will be the immune herd: fear and loathing under lockdown. *Hyphen* 3.1 [WWW document]. URL https://hy-phen.space/journal/issue-3-1/we-will-be-the-immune-herd/ (accessed 25 September 2024).
Wilson, J. (2023a) Apocalypse and utopia in the salvagepunk metropolis. *City* 27.1/2, 39–55.
Wilson, J. (2023b) Apocalyptic urban surrealism in the city at the end of the world. *Urban Studies* 60.4, 718–33.
Wilson, J. (2024) Disintegration highway: towards a psychogeography of planetary urban breakdown. *Singapore Journal of Tropical Geography.* https://doi.org/10.1111/sjtg.12565.
Wolf, M. (2016) Rethinking urban epidemiology: natures, networks and materialities. *International Journal of Urban and Regional Research* 40.5, 958–82.
Žižek, S. (2021) Is barbarism with a human face our fate? *Critical Inquiry* 47, 4–8.