#### Original Article

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# Infrastructural stripping and 'recycling' of copper: producing the state in an industrial town in Serbia

This paper explores infrastructural disruptions of utility provisioning caused by stealing of copper infrastructural parts in a copper-processing town in Serbia. Such illicit practices of infrastructural stripping were part of copper circulation via theft, cynically referred to as 'recycling' of copper, and were incentivised by increased copper price and the specific local economy. Drawing from ethnography among the citizens who reacted to the disruption of the heating provision caused by infrastructural stripping and the disfranchised citizens who illegally recycled parts of infrastructures, I shift so far predominant scholarly focus on engagements with infrastructural material flows and/or their stasis to show how governance hinges on the very liquidation of infrastructural channels. Following the underlying mechanics of the 'state' and its uneven distributive politics, I argue that stripping of infrastructures and the consequential disruptions were vital in configuring the state as a desired framework necessary to regulate everyday (infrastructural) lives. I analyse how such process was arranged infrastructurally via socialist and post-socialist patterns, which enabled the maintenance of some configurations of power (from the socialist past) to govern the everyday (infrastructural) lives. The paper contributes to the intersection between anthropological literature on infrastructures and the state and the study of post-socialist infrastructures.

**Key words** infrastructures, illicit economies, state, copper, industrial town

#### Introduction

In spring 2013, I was drinking coffee with Joca, a 30-year-old teacher of an environmental protection course, in a teacher's lounge of the technical high school in the industrial town of Bor in Eastern Serbia. While we were discussing his course, my attention was suddenly interrupted by the local radio, which was playing in the background, announcing that there was a cut in the electricity supply in part of the town. The reason, it was reported, was that someone had tried to steal some electricity wires. The newsreader said that, unfortunately, a person had died that day from an electric shock while stealing them. One part of the copper-processing company called RTB<sup>2</sup> was also left 'in the dark'. Such news was not 'new' in Bor, Joca explained to me, as stealing of copper infrastructural parts was very frequent. This further prompted him

- <sup>1</sup> I use pseudonyms for all the interlocutors in this paper.
- The 'Mining and Smelter Basin Bor' [Rudarsko topioničarski basen Bor RTB Bor], hereafter referred to as 'the company' or 'RTB', was the name used until August 2018, when the company was sold to the Chinese company Zijin Mining Group.

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to explain the logic of such disruptions: he thought that 'the state' [država] should protect the infrastructure and that the corrupted state should restore the electricity supply. These thefts were 'legalised', according to him, considering that the state, the General Manager of the company and the police were involved too: 'The copper gets returned to the company, and everybody is involved!' he said, adding, 'Hey, the politicians legally robbed and stole from the citizens, the same General Manager [of RTB] did ... so why would anyone chase these people who steal only a little? They [the politicians] stole a vast number of factories in this country, the General Manager destroyed RTB during the 1990s, and they are not punished.' Then he joked, 'Did you know that the General Manager never steals?! You know what he is doing?' He paused. 'He is continuously investing in himself.' We laughed.

Joca's affective reaction provoked by the interruptions of infrastructural provisioning caused by stealing of copper infrastructural parts, practices which I call infrastructural stripping, was a widely shared preoccupation among the citizens of Bor. Just like in Joca's case, such preoccupations often brought together Bor's local copper economy, urban infrastructures and 'the state', seen as an entity that was not doing its part to prevent this kind of theft *and* as one which might have been actively participating in it. In this paper, I explore such entanglements to understand how practices of infrastructural stripping came to be understood as a form of action that was nested within a post-socialist context of enduring expectations of infrastructural provision, omnipresent party politics, the precarious position of the copper-processing company, and the global boom and bust of commodity cycles.

The breakdowns of infrastructural provisions due to infrastructural stripping were significantly different from other infrastructural breakdowns of heating or electricity that frequently occurred in Serbia. The latter were usually the consequence of a lack of maintenance of the outworn infrastructure built during socialism, a lack of resources to maintain it, and/or neglect or reduction of public services, increasingly felt after the dissolution of Yugoslavia. What made the breakdowns in Bor specific was the fact that the illicit practices were induced by the global market (the price of copper was high at that moment) and by the local economy, which was influenced by an indebted, statemanaged, post-socialist company (RTB). The circulation of copper via theft, cynically referred to as 'recycling' of copper, made copper objects increasingly deficient in the urban landscape of Bor. In this paper, I focus on infrastructural effects of such 'recycling' of copper to look at the ways in which the breakdowns legitimated the underlying mechanics of the state and its uneven distributive politics. While providing new ethnographic insights into still under-researched infrastructures in the post-Yugoslav region (see Johnson 2018), the paper contributes to the intersection between anthropological literature on infrastructures and the state as well as to the study of infrastructural dynamics within the context of post-socialism.

A large body of literature has shown how infrastructures are involved in configuring and materialising relations between the state and citizens (Harvey 2005; Larkin 2013; Dalakoglou 2016; Laszczkowski and Reeves 2017). To explore these dynamics and how they play a crucial role in shaping political subjectivities (Von Schnitzler 2008), the scholarship has, to a great extent, explored infrastructural engagements with water (Anand 2011, 2017; Schwenkel 2015; Barnes 2017), electricity (Gupta 2015), oil (Barry 2013), heat (Humphrey 2003; Şalaru 2018; Fennell 2011), waste (Kallianos 2018; Dalakoglou and Kallianos 2014), and so on. Such a focus on engagements with material flows and/or their stasis can be found in a number of ethnographies that focus even on illicit actions

that target infrastructures and their flows: from unauthorised repairs, reconnections and extensions of an electrical network in Tanzania (Degani 2017; 2018), unlawful water connections in Mexico (Meehan 2013), and the bypassing of metering devices and illegal water connections in South Africa (Von Schnitzler 2008, 2016) to 'bunkering' of oil in Nigeria (Gelber 2015). Altogether, this work has demonstrated how such practices play a vital role in political and social (re)ordering. Drawing from these insights, this paper shifts the focus from studying 'things' that flow infrastructurally to showing how governance hinges on the very liquidation of infrastructural channels. Stripping of infrastructures is a suitable lens through which to explore this and to show in detail what kinds of practices and configurations of power within a landscape of global capitalism today govern the everyday (infrastructural) lives in a place like Bor, a post-socialist, late-industrial town embedded at the semi-periphery of Europe (Blagojević 2009).

While ethnographically unpacking the production of power in this town, the paper particularly shows how stripping of infrastructures and the consequential infrastructural disorders became vital in configuring the state as a desired framework necessary to regulate everyday (infrastructural) lives. I illustrate how it was possible for such a process to be arranged infrastructurally via past socialist and post-socialist social, political and economic patterns, which enabled the maintenance of some configurations of power (from the socialist past) to govern the everyday (infrastructural) life. Furthermore, I also show how exclusions from infrastructural citizenship occurred according to class and ethnicity.

In this paper, I acknowledge the generative and relational capacity of the constitutive materials (Harvey 2019). I ethnographically depict their capacity and the capacity of infrastructures to undercut and sustain the perception of the state (which is certainly not reducible to them). I see the material things as neither 'prior to politics' (Anand 2017: 13) nor merely effects of social organisation and 'the effect of the politics' (Anand 2017: 13). Rather, I see them as involved in affecting relations and that the relations affect the materials. Hence, I draw from Laszczkowski (2015: 139), who argues that materials have a capacity to exercise agency in a Latourian sense of things as mediators, as active elements capable of altering the course and effects of the agency of others, and may, to an extent, stimulate humans to undertake particular actions.

In the first part of this paper, I embed the infrastructural disorders in the local context of recycling of copper. This is followed by ethnographic illustrations of the affective responses of the citizens who had their heating delivery destabilised by infrastructural stripping and of disfranchised citizens who illegally recycled pieces of copper, parts of urban infrastructure. My intention is not, by any means, to insinuate that the people I talked with committed the particular theft that I refer to in this paper. Rather, these descriptions portray the uncertain responsibilities *vis-à-vis* the state and the unequal access to citizenship via infrastructures. The paper is based on ethnographic material collected during the fieldwork I conducted in this town for 14 months from August 2012 to September 2013 and during my visit in April 2018.

### Recycling of copper: infrastructures and the local economy

The town of Bor, located 250 km southeast of the capital of Serbia, is a medium-sized town characterised by a mono-structural economy. RTB Bor, which consists of both

extractive and processing components, is the only producer of copper and precious metals in Serbia. The town and the company experienced a prosperous period during self-managed socialism in the 1960s and 1970s in Yugoslavia, when urbanised infrastructure emerged due to rapid industrial expansion and urbanisation. The company has been historically intertwined with the town's social and political life, prosperity and development. While the town was a symbol of socialist industrial success and modernism and the company was considered to be an industrial 'giant', after the dissolution of Yugoslavia in the 1990s, and further in the 2000s, both the town and the company became emblematic of post-socialist crisis, with an impaired environment and precarious economy.

My fieldwork in 2012 and 2013 overlapped with a moment of alleged 'revival' of the then still state-managed company, which occurred due to a rise in the copper price on the global market and political and economic support at the local and national levels. The company was in the process of restructuration, a status granted by the state, which temporarily protected it from external creditors and debtors. Alongside this, the Serbian government subsidised the company and acted as a guarantor for colossal loans, thus ensuring that the struggling 'strategic' company was kept economically alive. This was both a populist measure of 'buying social peace' and looking for a strategic partner to finally sell the ailing company. The revival as a campaign enabled party-political votes to be secured and to create pathways for privatisation in 2018, when the company was sold to a Chinese state company.

Until 2018, the managers of this company were the leading party-political figures in the municipal assembly. Their colleagues from the same political party, over whom the industrial managers had influence, governed the public utility companies that were owned by the government. RTB itself was intertwined with the work of utility companies. For instance, the General Manager of RTB, through his influence as a leader of the ruling political party (which held power at local and national level), had the capacity to make infrastructures work through his political power and patron-client relationships. For instance, he would bring a certain amount of coal to the heating plant in order to help it start working on time or would pressure the workers at the public utilities to work overtime in order to finish the repairs more quickly. At that time, heating and electricity utility providers in particular were economically, technically and environmentally unsustainable and highly indebted. Moreover, it was still difficult to disconnect from the state providers, as they were the only providers. It was also impossible to disconnect from district heating systems, due to the physical inability to disconnect from the joint pipes (see Collier 2011).<sup>3</sup> As they increasingly polluted and became less affordable, all these issues made the electricity and heating provisions major topics of political contentions and collective concerns in Serbia.

Even though the infrastructural provision of electricity and heating occasionally kept failing, the urban infrastructures still succeeded in producing a generalised sense of social good to which the residents subscribed (see Harvey and Knox 2012). Built and installed during socialist urbanisation, the Yugoslav state had assured (in the past) that it would deliver prosperous socialist futures, modern and comfortable lives, and welfare and care through setting up modern urban infrastructures (Jovanović 2019).

<sup>&</sup>lt;sup>3</sup> I discuss elsewhere the ways in which the obduracy of materials was involved in reconfiguring the social contract among the heating users and I point to distinctive processes that make these infrastructures visible (see Jovanović 2019).

As a 'modern infrastructural ideal' and as a 'bundle', it was simultaneously integrated into the socialist idea of the provision of the 'minimum living standard'. The infrastructural modern lives reflected the aspirations of the Yugoslav state to ensure socioeconomic development, such as equal access to jobs and housing (Djurašovic 2016: 107–8). Even though socially owned flats and jobs were not equally distributed in practice, the infrastructural entitlements such as heating and electricity were widely distributed. Through collective, social and political efforts, infrastructures had a role in being themselves socially transformative (Humphrey 2005) – socialist citizens should have fulfilled their part of the social contract through labour (as producers and workers) and, in return, they expected the socialist state to deliver hardware and software for daily modern living.

My interlocutors often told me that stealing of copper objects had worsened over the past few years since 2012 because the copper price had increased and because the particular money-go-round economy was to a great extent influenced by RTB. In general, copper's physical properties allow its wide use in infrastructures due to its availability, excellent formability, good strength when alloyed, high thermal and electric conductivity, non-corrosiveness, resistance, malleability and flexibility (Campbell 2008: 469). These material properties also made it prone to being stolen. Electricity and telephone cables, pipes, heating substations, and phone signal transmitters went missing too. The town had almost no manhole covers over the underground utility vaults, leaving telephone, electricity and heating vaults exposed. The stone blocks in the middle of the pavements, a permanent municipal solution to the stolen metal manholes, were a reminder of the striking process of 'demodernisation' (Graham and Marvin 2001). The infrastructure was sometimes left permanently exposed, 'as the tendrils that connected ... to modernity are literally carted off and melted down for a quick buck' (Graham and Marvin 2001: 3). According to some of my interlocutors, the reason why Bor experienced this rapid increase in illegal activities was especially because copper was produced in the town: the stolen copper objects were sold to and smelted by (illegal) private companies, sometimes even officially registered as legal ones. According to these apprehensions, which were even confirmed by the company's official statements, this copper concentrate was then sold to the indebted company, which had a low concentration of copper in ore and was in need of more copper. The company would then sell the concentrate on the London Metal Exchange. Ironically, copper produced by this company was even sold to other Serbian companies that made electric cables used on a vast scale in industrial areas and urban infrastructure.

The insufficient capacity for extractive production and the dependence of the company on imported copper concentrate impacted on the dynamics of copper 'recycling'. Interestingly, the insufficiency of this crucial metal was a characteristic that was found in many socialist settings. For instance, in socialist Hungary, as Gille (2007) argued, the shortage economy in the metal industry was handled through collective collection of scrap metal officially organised by the authorities. Today, the post-socialist survival of the company in Bor highlighted the scarcity of the metal and significance of copper scrap metal, but differently organised: the company prompted the need for the production of (illegal) waste and propelled the informal scrap-metal economies. The money-go-round economy and the circulation of copper in Bor were characterised not only by the scarcity of the material but also by significant indebtedness (the company was indebted to the state for electricity, to external debtors, and so on; the municipality was indebted to the state and the citizens to the utilities). Due to this specific

local economy, the infrastructural objects were a different kind of waste. Namely, the objects made into waste were characterised more by being deficient matter. Hence, they were not a leftover, spillover, product of abundancy or an indeterminate excess (Alexander and Reno 2012) within overproducing capitalism, all characteristics of waste often pointed out by anthropological accounts (Alexander and Reno 2012; Reno 2015). Copper parts were indispensable, operable objects with potential, a 'matter in place' (to paraphrase Mary Douglas 1966) (in heater exchangers, in wires), made temporarily a 'matter out of place' to be reused, remade and recast. While generating value out of waste (Millar 2008; Reno 2015), it became 'a matter in another right place' (in the smelter) and was eventually potentially returned to make the infrastructural provision operational. It is such economic and social dynamics, which also echo socialist and post-socialist economies (Verdery 1995; Humphrey 2003) where materials and inputs are constantly recirculated, that today shape the infrastructural disorders caused by stripping of infrastructures and the political terrain in this town.

The circular economy of copper was the reason why my interlocutor Stanko (age 47), a private entrepreneur whose company collaborated with RTB and whose family I spent time with, ironically contended, like many other citizens of Bor, that the most effective recycling activity was the illegal 'recycling' of copper objects. The environmental endeavours such as recycling of paper or glass appeared ironic since the most urgent environmental issue was the by-product of copper smelting, which made this town the most polluted in Serbia. 'Recycling' of copper was always compared to some other almost non-existent environmental recycling activities promoted only by a few, not quite active environmental organisations. This irony can be illustrated by an ecological project that won a competition in 2013 by making and installing a bronze three-headed bird-like robot that was supposed to collect tin cans for recycling. As no one maintained this machine and the recycling endeavours remained underdeveloped, the unused robot became broken and was left to stand in the town square for years. Its unusual, avant-garde aesthetics saved this doomed project from being completely removed. In 2017, the municipality provided it with a new role in the town square as a sculpture. Ironically, this ecological-robot-turned-sculpture turned out to be a convenient target for scrap metal theft. As a final solution to its volatile existence, the sculpture was set in a cage and displayed behind metal bars, reminding the citizens that there was only one kind of efficient recycling. In the following ethnographic accounts, I illustrate the effects of this economy, embodied in the bird statue, with regard to the infrastructural provision and the ubiquitous presence of the state.

### Navigating infrastructural stripping in the town of copper

Immediately after the theft of a heat exchanger at the beginning of November 2012, twelve candelabras and lampposts disappeared from the front of the sports centre, leaving electrical wires sticking out of the ground and part of the town in darkness. I lived close to this area and my neighbours complained that they did not feel safe at night without electricity. On the same day, the whole heating substation was stolen as well, leaving a couple of buildings without heating for several days. The heating company reacted immediately in the media: 'If this tendency continues, there will be some

serious problems with heating delivery for certain parts of the town' (Blic 2012: np). It invited the citizens to protect the company's property and to report any 'suspicious persons' walking around the substations (usually kept on the lower floor or in the basements of buildings). The citizens were not indifferent to this news.

Many of my interlocutors and their friends from Bor immediately started sharing the news and commenting on it on social media and on local Internet portals, wondering how an object that weighed a couple of hundred kilos could have gone missing without anyone noticing! What struck me regarding people's comments, which were illustrative of how the vast majority in Bor reacted to similar situations, was that this event prompted citizens to discuss the matter of responsibility regarding the constant provision of heating in relation to the state, municipal bodies and the company. One of my interlocutors also commented on this event and joined the contestation of ownership and what the state ought to provide to the citizens:

And now they [the heating power plant] are complaining to people?! It is their job and the job of police to protect the equipment ... Do they think that the citizens will protect the heating system with weapons? The government says: 'We have been robbed by the thieves, and therefore there is no heating ... and you [citizens] are paying every month, even during summer'. What impudence! It is their responsibility to provide us with heating, and it is ours to pay for it ... And let them place a guard if they need to and not complain to us about how they have been robbed ... We don't care if they are robbed! I want a warm flat. I paid for it!

Similarly, another person commented:

As far as I know, the whole heating system is the property of the heating company and I know that I am not allowed to change anything on my radiator (to fix it, etc.) because it is their responsibility. The state should protect its infrastructure.

My interlocutors who worked at the municipal office where I volunteered argued that those who committed the crime were well known in the town and that the corrupted state was also involved in this robbery, which made RTB responsible too because, allegedly, copper eventually returned there.

Radivoje (age 47) expressed his suspicion: 'And why do you think everybody keeps silent about the fact that most of the manholes and grids are missing on the streets of Bor?!'

My neighbour, whose children lived in that area, told me one day: 'Sosa [the General Manager of RTB] should have dealt with this a long time ago, but it might be that he is in this deal too. The state allows this'.

From these illustrations, we can see that the citizens, who were captive and dependent customers of the public company, believed that the state, the municipal bodies (many times equated with 'the state'), and even the company and the General Manager (as 'the state') should take care of keeping their flats warm. On the other hand, the utility company invited the citizens to take responsibility for themselves and for the community. As illustrated, some individuals protested against such a suggestion by emphasising that the heating infrastructure was not the citizens' responsibility. They argued that the heating plant should protect it and rejected the idea of seeing parts of the urban infrastructure as their own property. There was a clear calculation: customers

were paying the municipality for services, and such payment should guarantee the certain, stable, satisfying and constant delivery of heating. This calculation also included demands for protection of the heating infrastructure from potential thieves who could jeopardise everything that was expected from the services paid for.

Now, let us stop here for a moment and see the issues around stealing of infrastructural parts from a perspective of those who claimed that their 'job' was to steal scrap metal. The scrap metal was the primary source of livelihood for some members of the Roma community, who lived in precarious and poor financial conditions on the margins of society on the outskirts of town. The illegal activities were mostly associated with this community, although many others were involved. This population mostly lived in certain urban areas, which pointed to racialised, ethicised and spatial urban marginality (ERRC 2016). This community has been present in Bor since the town's foundation at the beginning of the 20th century and was also brought in as a labour force to work in the mine, which was turned into a Nazi work camp during the Second World War. A great number also arrived and still today continue to live as displaced as a result of wars in Bosnia and Herzegovina (1992–1995) and Kosovo (1999). In general, this population faces impoverishment, discrimination, intimidation, constant threats of forced evictions and struggles with housing rights, and has difficulty accessing infrastructural provisions, public services and education (ERRC 2016).

In October 2012, I visited the outskirts of Bor together with a librarian from the National Library of Bor with whom I frequently collaborated. He invited me to join one of his guests, a photographer from Switzerland, who was taking portraits for a project initiated by Bor's library. The three of us took a cab, which left us in the middle of the road, after which we continued on foot. The settlement was located up on a hill with long, two-storey housing blocks of crumbling concrete. The old cemetery was on the other side of the settlement and ended next to the cliff of the old mining pit and red copper-tinted hills and tailings. The librarian greeted people who passed in their cars. As we climbed the steps, we saw children running around and playing and some people looking at us. The librarian told us that people did not pass through this area frequently. We stood in the middle of a road made of stone and gravel. A couple of younger men approached us, appearing curious to find out what we were doing there. They did not seem disturbed by the photographer's camera either. Some of them stood in front of him, asking him to take a picture of them and their kids.

Many gathered around us after five minutes. When the librarian started a conversation with a couple of men, some of them started complaining about living conditions. 'Do you know how pretty this place was before? Engineers and doctors lived here once; it was not broken like this ... Our roofs are leaking. The sewage systems were good', one younger man said to me, adding that they had broken down and nobody maintained them. The electricity stopped working occasionally. 'That's why some of us gave up paying the state for the services', he said, continuing: 'The politicians come here only when they need us to vote for them, and they make empty promises to us ... but nobody ever remembers us after that. We are completely forgotten. My mother is very sick.'

One of the men was talking to the photographer in German, as he had lived in Germany for a while and had worked there in McDonald's. He had come to Serbia through the EU re-admission programme.<sup>4</sup> Another man asked what I was doing in

<sup>&</sup>lt;sup>4</sup> Since 2007, the Serbian government has carried out the so-called readmission and reintegration programme of persons who were residing in the EU but had no legal basis.

Bor, and I said I was writing a book on the town. They nodded, and a third man, joining our conversation, said I should join them to write about what they were doing and laughed. From the way he was gesticulating and because of the stories I had heard from people, I thought he was referring to the theft of copper.

'We work the third shift', another man added, gesturing toward a couple of his friends who were preparing to go 'hunting' with a cart, which meant that they were preparing to get some scrap metal somewhere. They informed me that they were about to get some cables somewhere, as they could be very easily carried and smelted.

The postman, wearing his blue uniform, arrived on a yellow sports motorbike. Men gathered around him to take their letters. One opened his phone bill in front of me. He approached and told me how he had to pay for the electricity but that he did not receive the social welfare benefit to which he was entitled from the state. He continued: 'They cancelled it three months ago, without any explanation ... There are a lot of costs, and I have to feed my family as well. I have to pay for everything.'

'I am sorry to hear that', I said. 'Can you complain?' I asked, perhaps naïvely.

He smiled and said there was no point. 'There is nothing left for us ... but to steal. We go there to the pit.' He indicated with his hand. 'There's a guard, and he lets us in. We know each other. We just need to be quick. Do you want to go with us?' he laughed, not expecting me to answer. I laughed as well. I was surprised at how overt about stealing he was. He told me that their job was hazardous, especially when it came to potential electric shocks and when it comes to obtaining scrap metal from inaccessible and dangerous places in both the area of RTB and the town.

'Hey, listen, we are not stealing from you ... we are stealing from the state. They [the government] do not give us anything', he said. 'The state has completely forgotten us. They recently cancelled the benefits owed to us and we are left on our own ... I need medical assistance, medications, electricity, to feed my children', he said. His wife joined the conversation and nodded her head. The librarian, the photographer and I left the settlement quite unsettled, as the exclusion and impoverishment of these individuals were striking.

### Desiring the frameworks of the state to regulate everyday (infrastructural) lives

From the ethnographic descriptions above, it is possible to see that, perhaps surprisingly, in both examples the question of morality was not a question of whether stealing of copper objects was immoral or not. Rather, the liquidation of infrastructural channels opened up questions about legibility, the transparency of social goods and which kinds of thefts and debts were legitimate. It also made visible a concern about whose responsibility it was to provide care and welfare, who had access to them, and how care and welfare were unevenly distributed. For all my interlocutors, the state, as a paradoxical object of accusations of corruption and demands for care, was an entity accountable for the provision and one that was unable to provide.

For the disfranchised citizens, the state was perceived as an entity that failed to provide the basic welfare. The copper objects were converted into a chip for access to the state that ought to provide such welfare and care. In fact, copper was 'the state' as much as the company was. 'The state' was evoked as the absent negligent proprietor

from whom it was legitimate to steal to provide for one's future. This was something that the citizens did not consider (socially) desirable but interpreted as necessary. The individuals I spoke to that day claimed that they targeted the state with their actions rather than the users of the telephone signal or heating, while certainly knowing that their acts might cause breakdowns.

Through the argument about the lack of resources, formulated in an inability to pay utility bills, provide for families and sustain everyday lives, these individuals expressed their powerlessness in the state hierarchy. Therefore, the illicit actions can be interpreted not merely as a reaction to their poverty but also as a political explanation, to use Herzfeld's words (1988). Through such a formulated 'argument of hunger', in contrast to Herzfeld's (1988) findings among the Glandiots in Crete, who *disregarded* the state by stealing sheep, my interlocutors recognised the state as their legitimate 'provider' but as one that did not fulfil its part. They performed for the Others, including myself that day, as people who were entitled to provisions, while the Others, such as the other utility users, sometimes blamed them for the lack of provision.

For the utility users, the state was embodied in corrupted politicians and in the utility company that allegedly stole from the top. These users drew on the entitlements that the state had guaranteed to provide infrastructurally in the past - warm flats and justice. The state power also lay in the industrial managers who, supposedly, had 'taken out' copper for their personal interests in the past and still did so today. The utility users invested their hopes within the frameworks of the state by directly appealing to the corrupt authorities in power to maintain the provision of heat and to protect common parts of the infrastructure. They, thus, deflected the attempts at individualisation of responsibility. They also invited the authorities in power (the police, the General Manager, the company, the heating plant), allegedly all complicit in theft, to bring back the provision, sometimes even by recalling the capitalist logic of the entitled consumer (see Jovanović 2019). Paradoxically, they desired the theft and infrastructural disorders to be regulated by the same configurations of power as were accused of being involved in the theft. Such practices that involved simultaneous criticisms of the state as the source of corruption and yet also yearning for its regulation resemble widely documented similar dispositions in ethnographies of post-socialism in Serbia and Bosnia and Herzegovina (see Spasić and Birešev 2012; Greenberg 2014; Jansen 2015; Rajković 2017; Simić 2018).

For all my interlocutors, the events around stripping of infrastructures configured the state in very specific ways. It was not only that the 'state effect' (Mitchell [1999] 2006) was produced through these events. The state was actually more than that: it was a desired framework that ought to and was seen as necessary to make possible and regulate everyday (infrastructural) lives. Through infrastructural stripping, the power of the state was 'infrastructuralised' (Chu 2014, cf. Mann 1984), and so was the power of the company. Such infrastructural reconfiguration of the relations between the state and the citizens resembles what Jansen referred to as 'grid desire' (Jansen 2015), as particular yearnings to be encompassed and made legible by a state. Such hope for the state, according to him, 'calls forth the state as the structural effect' (Jansen 2015: 129). Desiring such frameworks via infrastructures and stealing of their parts should also be understood within the particular context in two ways.

First, the increased interventionist role of the state especially visible on the market, as suggested by Lazić and Pešić (2012), played a role in facilitating such yearnings. The interventionist role of the state was mostly visible in towns where 'strategic' former

Yugoslav industrial 'giants' were situated (see Rajković 2017) and where the government intervened in their functioning. In Bor, the copper-processing company and the utility companies were significantly dependent on state support (the company was even saved from 'death' by the state through the provision of myriad incentives). The expansion of governmental interests also occurred through the practice of employing party-political members and their supporters in utility companies, which is how RTB generated political votes for the politicians and how the political parties advertised their engagements through managing the utilities. Since party-political interests were strongly ingrained in governance, the state was embodied in 'the government', the municipality, RTB, its General Manager, the heating plant, politicians, and so on.

Second, yearnings for the state as a regulative framework should also be understood as the product of particular configurations formed during socialism, where the urban, economic and political governance overlapped in myriad ways. The fact that the company was inseparable from the town's governance and its development in the past also inflected the ways in which power was constituted today and infrastructurally felt (and desired). Hence, social, economic and political patterns in Bor shaped during socialism had an important role in reconfiguring contemporary transformations (see Collier 2011; Rogers 2015). The state, embodied in the Head Director, the heating plant, the copper-processing company, and politicians, persisted as the crucial entity responsible for the management of the flawless infrastructural governance. Hence, the dynamics around infrastructural stripping was influenced as much by past socialist socio-political and economic patterns as by post-socialist ones in maintaining some configurations of power (from the past) to govern everyday (infrastructural) lives.

However, such configurations today persisted in a highly transformed social environment. After the erosion of the socialist state and its retraction in the provision of welfare, the social contract between the state and the citizens had been changing. Living standards decreased rapidly as a product of global deindustrialisation and due to post-Yugoslav decline. The company no longer employed 'the whole town'. Unlike in socialist times, when they were provided as social goods, today electricity and heating were provided more as a commodity and a service. Altogether, this contributed to making access to citizenship via infrastructures unequally distributed. The ethnography in this paper shows how such uneven distribution occurs along ethnicity and class (among other axes of power). These transformations, thus, significantly inflected the experience of infrastructural provision in Bor.

#### Infrastructural disorders unfolding in a post-socialist town

In order to even better understand the infrastructural effects of stripping of infrastructures, in the last part of the paper I want to emphasise one more element that also played a crucial part in configuring power – namely, the role of infrastructural disorders produced by infrastructural stripping. The scholarship on infrastructures has precisely pointed to the social and political role of disorders, unruliness, instability and contingency that are all considered to be inherent in infrastructures (Jackson 2014; Chu 2014; Graham 2010; Graham and Thrift 2007; Edwards 2003). Even though it has been widely asserted that disorders render taken-for-granted infrastructures visible

(Star 1999; Humphrey 2003; Graham and Thrift 2007), the disorders in Bor were not the only condition on which the infrastructures were made visible. Recycling of copper and the potential of the very liquidation of infrastructural channels made them continually visible as potential targets and objects of contentions. Drawing from the body of literature on disorders, in his study of waste management in Athens amid austerity crisis, Kallianos showed how the 'interpolation' of disorders within the infrastructure pattern (2018: 770), especially of the internal ones (those that were integrated in the design of infrastructures), made infrastructures 'actionable' from the point of view of urban governance. As a result, he argued, it facilitated (and justified) the process of their neoliberalisation. The disorders in Bor did play an important role in urban governance but were involved in creating different political outcomes.

As I explained, the practices of infrastructural stripping and their effects reinforced the legitimacy of the authorities in power. Even the illicit economy did not function as an alternative system to the official economy but was seen as constitutive to the state (see Firlit and Chlopecki 1992). In all ethnographic illustrations, the state was perceived as an entity that regulated the money-go-round logic through illegal independent smelters, supposedly 'tolerated' by the authorities. In fact, the money-go-round economy and the politics of copper circulation show how the informal economy was seen to be operating within the activities of the state (see Morris 2019). Stripping of infrastructures was considered to be facilitated and organised by state officials and the company (largely associated with the state). When they caused temporary breakdowns of heating or electricity provision, the disorders made infrastructures the sites of actions in particular for the company, the police, politicians and the heating plant. These events also created opportunities for the 'users' to demand their repairs by investing their desires in the frameworks of the state to regulate the provision. Through such dynamics, stripping of infrastructures and the consequential disorders became a significant part of the infrastructural dynamics implicated in repatterning the role of the state and making it a regulative framework. It was through the liquidation of infrastructural channels that caused disruptions that the events around stealing of infrastructural parts were made politically crucial. Hence, as I illustrated, governance itself hinged on the effects of the liquidation of infrastructural channels. As copper kept on circulating and stripping of infrastructures left the infrastructures still reparable, it perpetuated the paradox of accusations and care on both 'sides' of infrastructural disorder. This process, thus, provided legitimacy to those engaged in urban governance.

The dynamics of stripping of infrastructures in this paper have provided an insight into current predicaments of infrastructural citizenship in a town whose *raison d'être* has been seriously brought into question by the global and post-socialist transformations. In this peripheral town whose fortunes depended on copper, this 'vibrant matter' (Bennett 2010) was not only a good conductor of electricity and heat but also a good conductor of ambivalence and blame through which social relations and political subjectivities were infrastructurally remade. By illustrating the infrastructural effects of recycling of copper and of circulation of this scarce material, crucial for making industrial, urban and infrastructural futures possible, the paper has shown how practices of infrastructural stripping were constitutive to making such futures possible in a place 'expelled from the circuits of global capital and care of the state' (Dženovska 2020: 15). The paper has shown how in such a place, embedded in a landscape of uneven spatial development of capitalism (Harvey 2006), disaggregated and degraded infrastructural objects of morally ambiguous petty wheeling and dealing became surprisingly vital in

the post-socialist reconfiguration of governance and how power and the political got constituted through such peculiar infrastructural configurations.

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#### References

Alexander, C. and J. Reno 2012. Economies of recycling: the global transformation of materials, values and social relations. London: Zed Books.

Anand, N. 2011. 'Pressure: the politechnics of water supply in Mumbai', Cultural Anthropology 26: 542–64.

Anand, N. 2017. Hydraulic city: water and the infrastructures of citizenship in Mumbai. Durham, NC: Duke University Press.

Barnes, J. 2017. 'States of maintenance: power, politics, and Egypt's irrigation infrastructure', Environment and Planning D: Society and Space 35: 146–64.

Barry, A. 2013. Material politics: disputes along the pipeline. Oxford: John Wiley & Sons.

Bennett, J. 2010. Vibrant matter: a political ecology of things. Durham, NC: Duke University Press.

Blagojević, M. 2009. Knowledge production at the semiperiphery: a gender perspective. Belgrade: Institut za kriminološka i sociološka istraživanja.

Blic 2012. 'Bor: Lopovi ukrali čitavu podstanicu, stanari zgrade ostali bez grejanja' ['Bor: Thieves stole the whole substation, the residents left with no heating'], Blic 11 November (https://www.blic.rs/vesti/srbija/bor-lopovi-ukrali-citavu-podstanicu-stanari-zgrade-ostali-bez-grejanja/xrv9wmd) Accessed 24 March 2015.

Campbell, F. C. 2008. Elements of metallurgy and engineering alloys. Materials Park, OH: ASM International.

- Chu, J. Y. 2014. 'When infrastructures attack: the workings of disrepair in China', *American Ethnologist* 41: 351–67.
- Collier, S. J. 2011. Post-Soviet social: neoliberalism, social modernity, biopolitics. Princeton, NJ: Princeton University Press.
- Dalakoglou, D. 2016. 'Infrastructural gap: commons, state and anthropology', City 20: 822–31.
- Dalakoglou, D. and Y. Kallianos 2014. 'Infrastructural flows, interruptions and stasis in Athens of the Crisis', City 18: 526–32.
- Degani, M. 2017. 'Modal reasoning in Dar Es Salaam's power network', *American Ethnologist* 44: 300–14.
- Degani, M. 2018. 'Shock humor: zaniness and the freedom of permanent improvisation in urban Tanzania', *Cultural Anthropology* 33: 473–98.
- Djurašovic, A. 2016. Ideology, political transitions and the city: the case of Mostar, Bosnia and Herzegovina. London: Routledge.
- Douglas, M. 1966. Purity and danger: an analysis of concepts of pollution and taboo. New York: Praeger. Dženovska, D. 2020. 'Emptiness: capitalism without people in the Latvian countryside', American Ethnologist 47: 10–26.
- Edwards, P. N. 2003. 'Infrastructure and modernity: force, time, and social organization in the history of sociotechnical systems', *Modernity and Technology* 1: 185–226.
- ERRC 2016. 'Report for consideration by the European Commission concerning Roma inclusion in the Western Balkans Progress Reports', European Roma Rights Centre (http://www.errc.org/uploads/upload\_en/file/ec-submission-on-roma-inclusion-in-the-western-balkans-july-2016.pdf) Accessed 29 October 2020.
- Fennell, C. 2011. "Project Heat' and sensory politics in redeveloping Chicago public housing", Ethnography 12: 40–64.
- Firlit, E. and J. Chlopecki 1992. When theft is not theft, in J. Wedel (ed.), *The unplanned society: Poland during and after Communism*, 95–109. New York: Columbia University Press.
- Gelber, E. 2015. Black oil business: rogue pipelines, hydrocarbon dealers, and the 'economics' of oil theft, in H. Appel, A. Mason and M. Watts (eds.), *Subterranean estates: life worlds of oil and gas*, 274–90. Ithaca, NY: Cornell University Press.
- Gille, Z. 2007. From the cult of waste to the trash heap of history: the politics of waste in socialist and postsocialist Hungary. Bloomington, IN: Indiana University Press.
- Graham, S. (ed.) 2010. When infrastructures fail: disrupted cities: when infrastructure fails. London: Routledge.
- Graham, S. and S. Marvin 2001. Splintering urbanism: networked infrastructures, technological mobilities and the urban condition. London: Routledge.
- Graham, S. and N. Thrift 2007. 'Out of order: understanding repair and maintenance', *Theory, Culture & Society* 24: 1–25.
- Greenberg, J. 2014. After the revolution: youth, democracy, and the politics of disappointment in Serbia. Redwood City, CA: Stanford University Press.
- Gupta, A. 2015. 'An anthropology of electricity from the global south', *Cultural Anthropology* 30: 555–68. Harvey, P. 2005. The materiality of state-effects: an ethnography of a road in the Peruvian Andes, in C. Krohn-Hansen and K. Nustad (eds.), *State formation: anthropological perspectives*, 123–41. Cambridge: Pluto.
- Harvey, D. 2006. Spaces of global capitalism: towards a theory of uneven geographical development. London: Verso.
- Harvey, P. 2019. Lithic vitality: human entanglement with nonorganic matter, in C. Krohn-Hansen, K. G. Nustad and P. Harvey (eds.), *Anthropos and the material*, 143–61. Durham, NC: Duke University Press.
- Harvey, P. and H. Knox 2012. 'The enchantments of infrastructure', Mobilities 7: 521-36.
- Herzfeld, M. 1988. The poetics of manhood: contest and identity in a Cretan mountain village. Princeton, NJ: Princeton University Press.
- Humphrey, C. 2003. Rethinking infrastructure: cities and the Great Freeze of January 2001, in J. Schneider and I. Susser (eds.), Wounded cities: destruction and reconstruction in a globalized world, 91–107. Oxford: Berg.

- Humphrey, C. 2005. 'Ideology in infrastructure: architecture and Soviet imagination', *Journal of the Royal Anthropological Institute* 11: 39–58.
- Jackson, S. 2014. Rethinking repair, in R. Gillespie, P. Boczkowski and K. Foot (eds.), *Media technologies: essays on communication, materiality and society*, 221–39. Cambridge: MIT Press.
- Jansen, S. 2015. Yearnings in the meantime: 'normal lives' and the state in a Sarajevo apartment complex. Oxford: Berghahn Books.
- Johnson, C. E. 2018. 'The moral economy of comfortable living: negotiating individualism and collectivism through housing in Belgrade', Critique of Anthropology 38: 156–71.
- Jovanović, D. 2019. The thermodynamics of the social contract: making infrastructures visible in the case of district heating in two towns in Serbia and Croatia. in T. Tuvikene, W. Sgibnev and C. S. Neugebauer (eds.), *Post-socialist urban infrastructures*, 38–53. London: Routledge.
- Kallianos, Y. 2018. 'Infrastructural disorder: the politics of disruption, contingency, and normalcy in waste infrastructures in Athens', *Environment and Planning D: Society and Space* 36: 758–75.
- Larkin, B. 2013. 'The politics and poetics of infrastructure', *Annual Review of Anthropology* 42: 327–43. Laszczkowski, M. 2015. 'Scraps, neighbors, and committees: material things, place-making, and the
- Laszczkowski, M. 2015. 'Scraps, neighbors, and committees: material things, place-making, and the state in an Astana apartment block', City & Society 27: 136–59.
- Laszczkowski, M. and M. Reeves 2017. 'Introduction: Affective states: entanglements, suspensions, suspicions', Social Analysis 59: 1–14.
- Lazić, M. and J. Pešić 2012. Making and unmaking state-centered capitalism in Serbia. Belgrade: Čigoja Štampa.
- Mann, M. 1984. 'The autonomous power of the state: its origins, mechanisms and results', European Journal of Sociology/Archives Européennes de Sociologie 25: 185–213.
- Meehan, K. 2013. 'Disciplining de facto development: water theft and hydrosocial order in Tijuana', Environment and Planning D: Society and Space 31: 319–36.
- Millar, K. 2008. 'Making trash into treasure: struggles for autonomy on a Brazilian garbage dump', Anthropology of Work Review 29: 25–34.
- Mitchell, T. 2006. Society, economy, and the state effect, in A. Sharma and A. Gupta (eds.), *The anthropology of the state: a reader*, 169–86. Oxford: Blackwell.
- Morris, J. 2019. 'The informal economy and post-socialism: relational perspectives on the state, labour and social embeddedness', *Demokratizatsiya: The Journal of Post-Soviet Democratization* 27: 9–30
- Rajković, I. 2017. 'Concern for the state: "normality", state effect and distributional claims in Serbia', Γιασιμα ΕπηοΓραφοκοΓ ιμεπιμηγικα CAHY 65: 31–45.
- Reno, J. 2015. 'Waste and waste management', Annual Review of Anthropology 44: 557-72.
- Rogers, D. 2015. The depths of Russia: oil, power, and culture after Socialism. Ithaca, NY: Cornell University Press.
- Şalaru, M. 2018. 'BLOCUL an ethnography of a Romanian block of flats', PhD dissertation, University of Oxford.
- Schwenkel, C. 2015. 'Spectacular infrastructure and its breakdown in socialist Vietnam', *American Ethnologist* 42: 520–34.
- Simić, M. 2018. 'Anthropological research of the state: a view on postsocialism', Γλαсник ΕπιοΓραφοκοΓ института CAHV 65: 15–29.
- Spasić, I. and A. Birešev 2012. Social classifications in Serbia today: between morality and politics, in P. Cveticanin (ed.), Social and cultural capital in Serbia, 139–58. Niš, Serbia: Centre for Empirical Cultural Studies of South-East Europe.
- Star, S. L. 1999. 'The ethnography of infrastructure', American Behavioral Scientist 43: 377-91.
- Verdery, K. 1995. 'Faith, hope, and caritas in the land of the pyramids: Romania, 1990 to 1994', Comparative Studies in Society and History 37: 625-69.
- Von Schnitzler, A. 2008. 'Citizenship prepaid: water, calculability, and techno-politics in South Africa', Journal of Southern African Studies 34: 899–917.
- Von Schnitzler, A. 2016. Democracy's infrastructure: techno-politics and protest after apartheid. Vol. 9. Princeton University Press.

## Dépouillement des infrastructures et 'recyclage' du cuivre : production de l'État dans une ville industrielle serbe

Cet article explore les perturbations infrastructurelles de la fourniture de services publics causées par le vol de pièces d'infrastructure en cuivre dans une ville de traitement du cuivre en Serbie. Ces pratiques illicites de dépouillement des infrastructures faisaient partie de la circulation du cuivre par le vol, cyniquement appelée le « recyclage » du cuivre. Elles étaient encouragées par l'augmentation du prix et l'économie locale spécifique. En m'appuyant sur l'ethnographie des citoyens qui ont réagi à la perturbation des services de chauffage causée par le dépouillement des infrastructures et des citoyens privés de leurs droits qui recyclaient illégalement des pièces d'infrastructure, je m'écarte des discussions académiques prédominantes sur les engagements avec l'écoulement matériel d'infrastructure (et/ou leur stase) pour montrer comment la gouvernance s'articule sur la liquidation même des canaux d'infrastructure. En suivant les mécanismes sous-jacents de l'État et de sa politique de distribution inégale, je soutiens que ce dépouillement matériel (et les perturbations qui en découlent) étaient essentiels pour configurer l'État en tant que cadre souhaité nécessaire pour réguler les vies quotidiennes (infrastructurelles). J'analyse comment un tel processus a été organisé au niveau des infrastructures via des modèles socialistes et postsocialistes, permettant ainsi le maintien de certaines configurations de pouvoir (du passé socialiste) pour gouverner les vies quotidiennes (infrastructurelles). L'article contribue à l'intersection entre la literature anthropologique sur les infrastructures et l'État, ainsi que l'étude des infrastructures postsocialistes.

Mots clés cuivre, économies illicites, infrastructures, villes industrielles, état