RETHINKING THE CITY IN THE INDUSTRIAL AFTERMATH: SOCIO-INDUSTRIAL MEMORY AND ENVIRONMENTAL FALLOUTS

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Drawing on ethnographic studies of two postindustrial cities in Croatia, Sisak and Bakar, the authors analyse how the communities narrate their industrial pasts, address industry-related environmental fallouts and define the potentials of postindustrial urban life. They focus on diverse narrations and practices through which the formerly industrial communities make sense of industrialisation and deindustrialisation. Local understandings of (post)industrial urban life are grasped through the concept of socio-industrial memory. The concept highlights the fact that communities can have different ideas about similar socio-economic processes depending on the ways in which they conceptualise the present and futures of their postindustrial cities, but it also underlines that the process of industrialisation was orchestrated politically as an act of socialist modernisation. The article outlines shared features and investigates disparities of postindustrial city-making and, in doing so, underlines the significance of context-based interpretations of such transformations. In both cities, the shutting down of factories left the inhabitants without major providers of livelihood. In Sisak, deindustrialisation meant long-term unemployment, which triggered postindustrial nostalgia. For citizens of Bakar, socialist industrialisation is an environmental threat and a turn away from tourism-development prospects. The authors conclude that images of the industrial past change their meanings in relation to the present needs and fears of postindustrial communities, as well as their visions of alternative, hopefully brighter futures.

Keywords: postindustrial city, socio-industrial memory, environmental changes, Sisak, Bakar

INTRODUCTION

Industrial pasts and their aftermaths are experienced in multiple ways. They instigate different socio-industrial memories within postindustrial communities and former industrial cities. In this article, the industrial aftermath is seen as a temporal concept that encompass people's experiences in relation to industrial decay. It is also seen as a narrative niche that echoes industrial decline and ruination and makes them understandable to the postindustrial communities. It can reflect nostalgia for the work and life of the industrial communities that have been irreversibly changed. On the other hand, it can be formulated as a critical narrative about the hidden aspects of industrialisation and unwanted trajectories of socialist modernisation. Lastly, it encompasses the unspoken impacts on the environment brought by the industrial era. Creating memories of industrial pasts is a social process and an act of remembering. As such, it reveals how groups that share industrial memories "understand their position in the present" and conceptualise their possible futures (Fentress and Wickham 1992: 126). Drawing on ethnographic studies of two postindustrial cities in Croatia, this paper aims to analyse the ways in which postindustrial communities narrate their industrial pasts, address industrial aftermaths and imagine the potentials of postindustrial urban life.

This work was inspired by two different and separately conducted research projects that took place in two distinct industrial places in Croatia. One fieldwork was conducted in Sisak, a mid-sized city located in central Croatia, around 60 kilometres from Zagreb, the country's capital. It was one of the largest industrial centres in Croatia during socialism. With a population of around 50,000 citizens, almost half of them employed in industrial jobs and the majority of those in the city's ironworks, the city thrived throughout socialist times. The other fieldwork dealt with Bakar, a coastal place near the city of Rijeka, with a population of about 8,300. The coking plant established in this town, which started operating in the 1970s, has functioned as a symbol of the rise of socialist industrialisation.

Geographically these two urban areas are set apart. However, they are not to be treated as worlds apart. Their interconnectedness was established within a socio-technological imaginary fostered by the socialist modernisation of the former Yugoslavia in the second half of the 20th century. The sites shared an industrial history that put them together in the same corporate structure from the mid-1970s onward. The Sisak Ironworks and the Bakar coking plant, the two case studies in this article, were structurally connected within the Composite Organisation of Associated Labour as parts of the same subdivision called Steel and Casting Production. The bigger and mightier Sisak Ironworks Metallurgical Combine co-financed the construction of the Bakar coking plant (Franić 2016; Kužić 2022). The Bakar plant became a major metallurgical coke production site, producing coke for the purposes of the Sisak Ironworks and a number of other Yugoslav steel production sites (Gojić 2021). In a wider frame, they were both paragons, each on its own terms, of rapid socialist modernisation, politically coordinated industrialisation and urbanisation

during socialism. They both took a toll from rapid deindustrialisation, marked by war, the postsocialist transition and privatisation, as well as the global economic crises from the 1990s on. These processes led to the loss of two thirds of the nation's industrial jobs and the bulk of its industrial plants (Penava and Družić 2014). Sisak's fall from economic grace lasted for almost 30 years, during which it has become a poster city of deindustrialisation in Croatia. On the other hand, the tearing down of one of the highest edifices in Croatia at the time – the chimney of the Bakar coking plant – was turned into a visual marker of the country's turn away from the former Yugoslav orientation towards heavy industry. Industrial decline was often followed by the emotional fallout of the inflicted communities, which is a commonality shared by the inhabitants of Sisak and Bakar. However, the way these communities have handled it took different paths – one characterised by mourning over the shut-down industries and the other celebrating freedom from them.

The cases we discuss were originally designed as strategically situated single-site ethnographies (Marcus 1995). The first project was conducted as longitudinal ethnographic research of Sisak (Potkonjak and Škokić 2021, 2022). The second case study was carried out in the frame of a project that dealt with bioethical standards of city life and combined ethnological and public health research (Doričić et al. 2020). In both cases, different teams of researchers inspected a single site. While doing so, each team tried to establish "system-awareness in everyday consciousness and the actions of subjects' lives" (ibid.: 111). Each group was conducting fieldwork independently and irrespectively of the other. But we were both concerned with the role of declining industry in constructing postindustrial experiences.[1]

[1] The Sisak fieldwork was part of a large-scale scientific project titled *Transformation of Labour in Post-transitional Croatia* (2017–2021). The project was financed by the Croatian Science Foundation. It gathered 10 scholars with the intention of studying everyday lives and work in post-industrial cities and the different deindustrialised communities around Croatia. As a part of the original project, the Sisak ethnography was conducted by Tea Škokić and Sanja Potkonjak and occasionally by Reana Senjković Svrčić. During the most intensive research period in 2017, 2018 and finally in 2019, numerous interlocutors were contacted. They made for a group with very diverse backgrounds, from long-term unemployed workers of Sisak Ironworks, one-time city officials, public intellectuals, journalists and members of activist groups to industrial neighbourhood tenants and retirees from the industry, among others.

The fieldwork in Bakar was conducted in the frame of a research project titled *European Bioethics in Action* (2014–2017). It was led by Amir Musur, the School of Medicine, University of Rijeka, and financed by the Croatian Science Foundation. It included 12 researchers who dealt with communities' relationship towards health and environment in three different Northern Adriatic localities (Bakar, Kršan and Manji Lošinj). The research in Bakar was largely carried out by Robert Doričić (2019). It mostly focused on the effects of industrial pollution on mortality and disease characteristics in the locality and was grounded on quantitative methods. However, it also encompassed a qualitative line that tackled the experiences and quality of life in Bakar from the perspective of the local inhabitants. Nevena Škrbić Alempijević was invited to participate in the ethnographic segment of the Bakar case study (Doričić et al. 2020). The fieldwork was organised on several occasions in 2017 and 2018. It included discussions with a focus group consisting of members of non-profit organisations from Bakar. Afterwards, several interviews were conducted with local inhabitants (36 to 86 years old) who were not part of the NGO sector and had lived and worked in Bakar from an early age.

The claims here are drawn from the ethnography conducted during the fieldwork in Sisak and Bakar, thus making for a meta-ethnography of a sort. They do not draw upon an exact set of empirical data but are inspired by and call upon the interpretations of postindustrial ethnography in the two cities (cf. Potkonjak and Škokić 2022; Doričić et al. 2020).

In order to bridge differences and look for commonalities inscribed in two separate research projects we have revisited George Marcus's ideas on how to construct global fieldwork within one locale and find interconnections between independent sites. While we conducted our research and encountered people locally, we contemplated the findings more broadly. However, only after the idea to compare the two sites was born, an odd and, to a certain extent, an unprincipled post-fieldwork approach came to life. It enabled us to do a non-premediated comparative post-fieldwork analysis. We decided to compare these two ethnographic sites, the two cities and communities, and to scrutinise them within the framework of the socialist ideas of mass scale and rapid industrialisation, as well as postsocialist economic transformation and deindustrialisation. The links between the two different fieldworks that we observed in our discussions became an outline for a methodological experiment in strategically situated ethnography that has turned into a multi-sited project. By using "comparative translation and tracing among cites" (Marcus 1995: 111), we established a hybrid method stretched and settled in-between multi-sited, and within the single-sited, ethnographies. Its focus is on re-reading the narratives and re-negotiating the interpretations of deindustrialisation in an attempt to reveal hidden and obvious, contingent or immediate relations, connections and divergencies between the two case studies. In this process, the industrial fallouts that we had analysed separately at first started to converge in our comparison, shaping into a story of deindustrialisation that took different paths. By observing the commonalities and differences between the former industrial sites, we have found that deindustrialisation is not a simple and straightforward phenomenon with a single meaning. Such an approach provided us with insights into different socio-industrial memories that triggered different imaginings of socioenvironmental futures freed of industry, but not necessarily of its effects.

SOCIO-INDUSTRIAL MEMORY

> **Place is a temporal attainment that must be constantly renegotiated in the face of changes that arrive from without and within, some benign, others potentially ruinous. (Nixon 2011: 18)**

The metaphor of socio-industrial memory has been coined to frame the knowledge emerging from the comparative perspective we harbour in this article. We use it to analytically grasp narrations and attitudes related to the socialist industrial pasts that are created in order to address neuralgic points of everyday lives in two postindustrial communities. It stems from the critique established by Rob Nixon, a scholar in environmental humanities, who addresses the ways modernisation, industry and capitalism introduce hidden violence and inflict wounds against space, communities and the environment (cf. Nixon 2011). The concept of socio-industrial memory that we propose is co-dependant and developed from Nixon's notion of socioenvironmental memory. These two terms do not

convey identical meanings, but they both emphasise that communities might have rather different ideas about the progress, development and socio-economic changes instigated by industrialisation. Socio-industrial memory is more specific than industrial memory. Here it refers not only to how people convey their relationship towards industrial pasts (cf. Vaccaro et al. 2016; Berger and High 2019; High et al. 2017; DeSilvey and Edensor 2012; Mah 2012) but also to the memories specifically related to the very particular, contextualised and localised effects of socialist modernisation. Socio-industrial memory implies an entanglement of socialist modernisation and memory of socialist industrialisation. It simultaneously relays the political aspect of industrialisation conducted by political powers and emphasises the political understanding of industrial development. This is why the concept of socio-industrial memory identifies, differentiates and examines two different post-socialist sentiments concerning socialist industrial modernisation. One is at odds with socialist industrialisation since it aggravated the community and its ideas of who it is, who it was and what it could have been if it had not been for socialist industrialisation. Secondly, we recognise another manifestation of socio-industrial memory that is permeated with nostalgia. This type of memory takes pride in socialist times and thinks of itself as though it had come into existence due to socialist industry.

Socio-industrial memories are imbedded in the local understanding of industrialisation and its effects on the community. It is more than tackling industrial memory per se, as it handles respective communities and their very diverse responses to, and attitudes towards, socialist industrial modernisation. Such local definitions can differ greatly from the ideas that ideological stakeholders, nations and economic-political actors of (de)industrialisation deploy within ever changing socio-technological imaginaries. Socio-industrial memory is thus a conceptual tool we use to keep up with the mindscapes of postindustrial transformation, also as seen from below from very specific social contexts. It refers to the cultural memory of the industrial past that lasts and is transmitted across several generations in a particular vernacular setting. It is a place-based and micro-level contextualisation of industrial memory. Socio-industrial memory comes with the ability to grasp and produce narrations constructed in a vernacular mode and in relation to the official narratives embedded in a particular social setting.

The notion of socio-industrial memory sheds light on three social aspects we want to highlight in this text. First, the concept refers to the ways in which communities renegotiate their knowledge of industrialisation. Second, it reveals how spatial vestiges of industry – the ruins and wastelands particularly – become used by communities to convey dissent, disregard and loathing and/or yearning, nostalgia and longing for socialist modernisation and industrialisation. Third, it shows how environmental concerns mobilise postindustrial communities to make sense of their past, present and future. Socio-industrial memory pays attention to the conflicting overlaps of the vernacular landscape and the official landscape (cf. Nixon 2011 for the concept of conflict within the landscape). It is a particularly useful analytical prism when the teleology of industrial progress made communities (re)build themselves to fit the socio-technological imaginary of socialist modernisation.

So far, industrial decline and deindustrialisation have been primarily studied by social scientists who have highlighted the question of how societies, communities and places survive this major change in the industrial paradigm. In many studies, the socio-economic and environmental changes caused by the decline of industrial work have been discussed and blamed for dismantling people's faith in their future (e.g., High et al. 2017). The studies on deindustrialisation have made connections between crumbling factories as landscapes of industrial progress and modernity on the one hand and the newly inflicted vulnerability of industrial communities and towns on the other. They emphasise personal and social burdens, personal loss; they tackle the epidemic of plant closures and the social consequences of economic and cultural devastation (High 2003, 2007; Bluestone 2003). In these works, deindustrialisation is described as a tragedy, destruction, the betrayal of trust, a catastrophe taking its toll on societies, communities, and their way of life (Cowie and Heathcott 2003). A focus on the destructive forces of the big industrial transformation permeated a major part of the early discussions of industrial decline done by labour historians and researchers of deindustrialisation. Another stream of thought took as its task to rethink the postindustrial landscape and its transformation after the end of industrial work (Kirkwood 2001) or, more recently, focus on sustainable urbanism and the role of industrial heritage in urban transformation (cf. Fouseki et al. 2020; Rhodes et al. 2021). Some of the writings engage critically with spaces of ruination, showing that they still represent places of social contestation and a vibrant field of research in critical urban studies (O'Callaghan and Feliciantonio 2021). Finally, environmental humanities provided a sharp criticism of industrial growth and decline, showing that industrial life is inextricably linked to pollution and the ruination of the human and natural environment. That is why the environmental fallouts of industrial growth and expansion, together with technologically instigated catastrophes, are taken seriously starting from the moment when economic progress began to take its environmental toll on industrial communities (cf. Petryna 2013; Lowenhaupt Tsing 2005; Nixon 2011; Fortun 2009).

Our theoretical approach combines current insights from postindustrial anthropology, urban studies, the anthropology of work, critical urban studies and environmental humanities. Rather than leaning towards the dominant interpretation of (de)industrialisation effects within postindustrial communities, we intend to present a multivocality of narrations that address the industrial pasts. Those underline the heterogeneity of people's relations towards industry and the multiple meanings they attach to former industrial sites. They bring out differences and nuances in narrations and practices that are grounded in diverse contexts and historical, geographical and social conditions, as well as different visions of urban futures. As we will show through our case study analysis, such an approach allows us to bring together local interpretations that treat industrialisation as a chance and a promise of a better future, as well as those that condemn it as a mechanism of undoing any prospect of a better life to come.

THE CASE OF SISAK: A ROMANCE WITH THE INDUSTRIAL PAST

The story of the Sisak Ironworks started several years before WWII, when the first blast furnace was opened in Sisak. In 1947, the project of the socialist iron and steel mill was conceived on the premises of the previously privately owned factory and was developed as a strategic industry throughout socialism following the war (cf. Čakširan 2018). From a few dozen workers at its beginning, the Sisak iron and steel industry grew to employ approximately 14,000 people by the end of the 1980s, making the city and industry "inextricably connected" (cf. Čakširan 2018: 9). The large industrial workforce of "socialist men" was forging, hot pressing and casting steel in ironworks**,** rolling mills and metalworks but also labouring as factory fodder for a thriving chemical industry, oil refinery, powerplant and textile industry, as well as the many other industries located in Sisak during socialism. Sisak's industrial growth prompted the emergence of a new industrial community and shaped what became the social and industrial landscape of a prosperous socialist industrial city. The experiences of numerous rural commuters who settled in the flourishing town to become factory workers, start their families and find new and modern accommodation in community housing projects influenced the positive ideas of industrialisation and socialist modernisation to thrive and last till nowadays. An intense romance with the industrial era started in Sisak in early socialist times. Fresh out from WWII, Sisak become a city of opportunity, not dissimilar to many other socialist cities and towns that were built anew and grew exponentially at that time. This was why the images of the proud socialist worker and the country's progress were inextricably linked together (cf. Matošević 2015). After socialism, Sisak's industrial workers vocalised their intimate experiences to honour Sisak ironwork's role in making the city and people of Sisak prosper. "The desire to reflect back and find value in the industrial past" (Strangleman 2013: 23) sustained people in keeping an image of better times close in their minds, but also to keep an image of self-worth.

Our interlocutors in Sisak often conceptualised the factory as their "mother" and themselves as being "the children of the factory" rather than simple workers. The narrative that was most frequently evoked to explain the role and the place of the steel mill factory in the hearts of the Sisak dwellers originated in a particular human-industry relationship, an intimate rapport rather than an ideology-based working contract. In the words of former workers, the Sisak steel mill "meant everything", it was the "city within the city", it was an "unbreakable fortress", a "giant that everyone partook in building". Many of the workers shared the same intimate experience of familiarity and bond to the factory. They echoed almost the same affect describing their relation toward the factory. "It used to feed us", they said, and "we grew with the factory", "the factory was my mother and father" and "it was my family". Explaining what has become a life trajectory seen through the lenses of industrial work, an interlocutor said: "we came of age working to our bones in it [the steel mill], to make it what it became – something to be proud of".

On other occasions, in informal settings and during interviews, it was often casually pointed out "that everyone in Sisak had someone working in the steel mill at some point

in time". These testimonies enable us to understand the importance of industry and its interconnectedness with the community. Ideas of the factory "as a provider" that created numerous possibilities of work, took care of family life, organised schooling, encouraged self-improvement, guaranteed advancement in the workplace, secured a reliable source of income and offered vacation time at factory seaside resorts prompted a collective nostalgia among former workers and their families once the factory was closed (cf. Potkonjak and Škokić 2015). It was there in the "utopian past", in retrospective, that the evidence of unselfish communitarianism, selfless collectivity and honour in taking part in building the new socialist society was to be found. It was why the emerging industrial life during socialism in Sisak was equated with the booming industrial community and is still seen in a positive light today.

The slow and persistent downfall and the final shutting of the Sisak Ironworks has been reflected in the painful memories of what was once a growing iron and steel industry. Nostalgic narratives, fed by the loss of steady jobs and paycheques and the disappearance of a comfortable and predictable life, stood poignantly in many narrations of deindustrialisation. It was only at that point that the ruinous landscape of the former industrial sites was scrutinised and the stories of pollution, disasters or health problems became more visible.

The city of Sisak had a very different path from other deindustrialised areas in Croatia. It pursued a unique path in reindustrialisation, which brought up an unsolved environmental issue and put another burden on the postindustrial communities. Sisak has become a national waste management centre, established on the premises of previous industrial zones. While environmental scholars remind us that the cause of our environmental problems lays deeply rooted within 19th century industrialisation and the history of industrial land use (Newman 2003: 112), new prospects of the reindustrialisation of Sisak were the first instance of deliberating on the role of industry and pollution in the city. Some citizens of Sisak have been driven to engage with industrial legacies by the growing environmental concerns raised by reindustrialisation. For those gathered in the citizens' initiative called "Sisak residents don't want to be scavengers!" [*Siščani ne žele biti smetliščani*], the environmental and health issues have become of central importance and a trigger for anxiety when talking about Sisak's postindustrial futures. Those who joined the initiative as early as 2019 explained that their mission was to voice concern and act against the reindustrialisation of Sisak. They gathered to fight against the decision to turn the city into a site of numerous waste-collecting and waste-processing businesses that mostly process hazardous and medical waste.[2] Although industrial prosperity and industrial pollution were symbolically intertwined already during socialism, the critical concerns over this awkward relationship have been voiced only in the industrial aftermath. Throughout the second half of the 20th century, having a factory job was more important than addressing the environmental impacts of industrialisation. The most obvious instances of deindustrialisation, such as ruinous landscapes, abandoned infrastructures, landfills and never-ending brownfields accumulated in slowly escalating environmental violence, have

[2] https://hr-hr.facebook.com/groups/siscani.ne.smetliscani/about (accessed 18 April 2023).

instigated a huge and unsolvable problem that limits Sisak's future. However, it has been defined as a problem only after the last days of industry.

This is how a member of the "Scavenger group" described the attitude of industrial workers towards the issue of pollution, evoking an experience of her immediate family who worked in the steel mill: "they knew what they risked by coming to work in a steel mill. And they did it despite it. It was for the bettering of themselves and their families" (cf. Potkonjak and Škokić 2021). It was a life of "calculated risk" taken by an industrial worker who had chosen a hazardous and potentially health-jeopardising job against the perspective of unemployment. In equations such as "dangerous job versus health" or "job versus environment", the job would always be the winner (Pellow 2000). On the other hand, a sort of reliance, which could be encountered in interviews, on the idea that the system used to work well and that it regularly took care of pollution, toxicity and the unhealthy environment provided for the unwillingness to discuss the health risks of living in the proximity of industry. While the factory brought food to the table, provided for schooling, pensions and a good health-care plan, not noticing the overwhelming impact that industrial production had on the human and natural environment was normalised (cf. Jovanović 2016). It was hard to untangle the factory as a benefactor from the image of the factory as a major cause of pollution. It was only in the aftermath of the industrial era that an awareness of the many dangerous and destructive outcomes of industrialisation, such as pollution and extensive waste production and its associated health risks, came to the forefront in public debates. Fearing for their city "slowly turning into one big disposal site and landfill for different kinds of waste, the place intended for disposal of anything that richer and more developed countries don't want in their backyards", made our interlocutors readdress the interconnectedness of industry and pollution. In their battle against the county's and city's decisions and governmental permits that have turned Sisak into one of the most prominent waste management sites in Croatia, local inhabitants looked beyond the immediate effect of new industrial jobs in waste processing industries and asked for environmental justice. The groups of post-industrial Sisak, like "Sisak residents don't want to be scavengers!", still shout "no!" very strongly. Arguing that their first aim is to keep the environment safe from further devastation, they are saying "no!" to all those industries that make someone else's waste business become the city's postindustrial destiny.

THE CASE OF BAKAR: ENVIRONMENTAL VIOLENCE AND POSTINDUSTRIAL FUTURES

In contrast to Sisak, the narrative of the industrial past and the effects of deindustrialisation in Bakar is set against a quite different socio-economic context, which paints an image of the socialist industry established there in dark and ominous tones from the very beginning. Before the intense industrialisation that occurred during the 20th century, the economy in Bakar was based on fishing, seafaring, naval education and training, trade and

tourism – activities largely dependent on the town's location on the north Adriatic, a clean environment and an intact Mediterranean ecosystem. Local interpretations that take into account "what came after" insist that, as one of the favourite Austro-Hungarian tourism areas easily accessible from numerous European centres of power (cf. Blažević 1987), the Kvarner Gulf – and Bakar as an integral part of it – had a pre-set route towards a bright urban future comparable to nearby destinations that have thrived on the tertiary sector, like Opatija, Lovran, etc. At the beginning of the 20th century, Bakar was recognised as a popular medical tourism destination that offered thalassotherapy treatments particularly adequate for lung diseases (Doričić 2019: 305).

However, another early 20th century trend, also related to the region's geostrategic position, made a long-term difference between the development of Bakar and most of the other places in Kvarner. The town's proximity to the fast-growing port city of Rijeka led to the establishment of transport and industrial infrastructure in Bakar from the 1910s on. Cargo terminals, a cement factory, an oil refinery and other plants were built in the first half of the 20th century. The presence of the harbour and industrial infrastructure, as well as the previously established status of the town as industrial, gave a boost to the massive industrialisation of the Bakar area after the WWII (Sić 1983: 61). The process was accelerated by an administrative change in the territorial organisation of local self-governing units, i.e., by the integration of Bakar into the Municipality of Rijeka, which turned Bakar into an industrial zone for the whole Rijeka Ring. The town and its surroundings thus became sites of black carbon production, an oxygen generator plant, industrial packaging production, modernised port facilities, the Rijeka Oil Refinery located in Urinj, the Thermal Power Plant Rijeka I and so on (Doričić 2019: 14–18). The transformation of Bakar Bay into an industrial zone is explained by our interlocutor as a chain reaction: "they [the industrial sites] simply started to pile up. Since that one has already been built there, let's add this one, too!" Although numerous manufacturing complexes were situated in Bakar, one site became a synonym of socialist industrialisation in the area and, at the same time, one of the showcases of modernisation throughout the former Yugoslavia due to its role at the national scale and visual impressiveness. It was a coking plant that started its mass production in 1978. The plant was the main fuel supplier for many Yugoslav steelworks, including those in Sisak (Mavrović 1981). It changed the landscape of Bakar considerably, with a 265-metre-high chimney that dominated the view of the whole bay. Also, it transformed the social structure and dynamics within the place. At its peak in the 1980s, it employed around 500 workers, out of which five sixths were men. Many of them migrated to Bakar from other parts of Yugoslavia with the prospect of finding a job in industry.

For local inhabitants, the coking plant also functions as a symbol of industrialisation in their hometown, but a notorious one. Our interlocutors view it as a sharp cut in their everyday lives, often summarised in sentences like: "that devil of the coking plant came and changed everything in Bakar". In this line, as well as in many local narrations, industrialisation, materialised in the shape and dust of the coking plant, is defined as an aggressive act of undoing urban futures, manoeuvring strategies of the town's development sideways and in directions

unwanted by the locals. They emphasise the suddenness and all-encompassing character of the changes caused by industrialisation. People who witnessed the changes underscore that the factory resulted in economic growth, as the following quote shows: "A lot of them lived at the expense of the coking plant, many inns, butchers and shops". However, the economic boost could not make up for the loss of potential futures, based on the imagery of a tourist paradise that did not come to be due to industrialisation.

In local memories of the factory, the violence against the town's future has several dimensions, the most important being the environmental damage. "Dirt" and "pollution" are the most common terms used to sketch the effects of the coking plant on the quality of life. Our interlocutors vividly describe how they experienced living next door to the factory: bodies and clothes that cannot be washed, the impossibility to breathe and changes in smell, taste and colour are the regular motifs that depict the creation of an industrial city. They also stress the effects of industrial pollution on the health of the local population, which have been corroborated by public health studies (Doričić 2019). For them, the town's contamination had a physical but also symbolic aspect. Bakar was stigmatised as a generator of pollution, an undesirable place to live and a corner of Kvarner uncharted on touristic mental maps. Such socio-industrial memories, grounded in the present-day issues that the community is facing, function as a certain kind of retrospective gaze at the industrial past and its consequences. However, already in the 1970s, many local voices were raised against the positioning of the factory in Bakar.

The local resistance to the coking plant's building plans is connected to what they saw as another layer of industrial violence against the previously envisaged future: the right of citizens to define their own development strategies. The local inhabitants with whom we carried out interviews present industry, and especially the coking plant, mainly as an unwelcome factor imposed from the outside, from state and regional positions of power. A feeling of lacking a voice in decision-making processes is strengthened by narratives of a glorious past at the turn of the 18th and 19th centuries, when "Bakar was the largest Croatian city in terms of population"[3] but which later lost its primacy to Rijeka. Many of the narrations we encountered in Bakar outlined trajectories of a lost glory. However, unlike Sisak, it was never the industrial past that resonated with nostalgia, but rather the preindustrial period. That tendency is shown in the way inhabitants recount an idyllic childhood in Bakar that changed forever and was corrupted by socialist industry, like in this example:

> Bakar, as I remember it from my youth, is a beautiful little town at the end of a deep bay, which rises from the seashore in steps with steep narrow streets along the hillside in a triangular shape, and ends at the top with an old, well-preserved castle. […] Today, Bakar is a city of smog, dust and stench where Rijeka moved a dirty, environmentally unacceptable and dangerous industry.[4]

[3] https://punkufer.dnevnik.hr/clanak/putovanja/bakar-ljeto-u-znaku-velikih-obljetnica---565995.html (accessed 4 January 2023).

[4] https://sites.google.com/site/jseabsd/ (accessed 4 January 2023).

"The political monster", as the coking plant is often referred to in the media (cf. Moravček 2013), was shut down in 1994, and the distinct visual marker of socialist modernisation – the chimney – was torn down "to the general satisfaction of the inhabitants of our area".[5] Since in local terms the coking plant is determined as "a historical mistake" and "a burden to the town's development", the collapse of the modernisation project is considered a chance for the restitution of the prospects that were open to Bakar in its preindustrial past. Various policy makers in Bakar are trying to move away from the industrial legacy and reinvent the town along other economic lines, primarily in the sphere of cultural tourism and entrepreneurship. However, the town still faces the long-term effects of industrial pollution. As the town's key weakness, the Strategic Development Plan for Bakar recognises the "consequences of wrong industrial projects in Bakar throughout history (the most well-known polluter being the coking plant, which destroyed the total environment of the Bay of Bakar)" (Grad Bakar 2016: 58). People who live in Bakar nowadays often share their feeling of living in a toxic environment and witnessing prolonged environmental suffering (cf. Auyero and Swistun 2007). They point out with regret that, unlike other locations in the region, their hometown cannot become a summer tourism destination because the industrial pollution is still a decisive factor for reimagining their futures.

CONCLUDING REMARKS: THE INDUSTRIAL WORLDS FALLING APART AS NEW WORLDS ARISE FOR SOME

Our two case studies highlighted two sets of narratives about industrial pasts and deindustrialisation in Croatia. They speak of the same vison of industrialisation, but also of a very different vernacular relationship towards it, as well as towards deindustrialisation. Though seemingly alike, the cases of Bakar and Sisak stand for very different readings of socialist modernisation and industrialisation. Their communities have worked out quite different socio-industrial memories over the past two decades and conveyed the communities' futures in two mostly distinct ways. Indeed, like our colleague who was born in Sisak would observe, "Bakar is celebrating [the closure of the coking plant] as it has a new utopia arising on the horizon, the one depicting a happier and better future. As for the city of Sisak, it mourns [the closure of its industry], because the city knows that there is nothing for people except to go and buy a one-way ticket to leave".

The studies of deindustrialisation reveal that the vanishing of the industrial way of life has brought a striking change (cf. High 2003: 6) in how industrial citizens perceive and remember their pasts, think about their present and define their futures. As a process of transformation within capitalism, deindustrialisation was depicted through plant closures, capital flight and political crises in the West (Cowie and Heathcott 2003: 5). On the other

[5] https://www.tz-bakar.hr/bakar/ostalo/jeste-li-znali/285-u-bakru-se-nalazio-jedan-od-najvecih-dimnjaka-u-hrvatskoj (accessed 4 January 2023).

hand, the massive layoffs, factory closures, privatisation, production migration and recession have left a strong mark on postsocialist countries and industrial workers as well.

In both cases we have presented, deindustrialisation has left the residents and industrial workers without a major means of livelihood and short on ideas on who they were, who they are or who they want to be. It also inflicted a major change within the landscape. What once was the naturalised industrial-scape of monoindustrial towns has gradually become a landscape of urban decay, ruins, voids and brownfields.

While the similarities of the two sites might be striking, the differences between the local socio-industrial memories appear to be even more prominent. They are expressed in how citizens feel about industrialisation and deindustrialisation, and how they reinvent their lives and imagine their futures.

For the majority of Sisak industrial workers, deindustrialisation meant long-term unemployment, uncertain futures and the mourning of what once was a prosperous and good city life. The urban space is filled with areas of old industrial infrastructure burdening the prospects of clean industry and smart reindustrialisation. However, the emergent postindustrial community imagines of both brownfield and greenfield developments that would bring new jobs and improve the quality of life with the promise of reindustrialisation while it withstands the environmental fallout of late capitalism (cf. Potkonjak and Škokić 2022).

For the citizens of Bakar, there is no room for industrial nostalgia. Socialist industrialisation of their town is seen as bad economic and urban planning due to the pollution and environmental risks it brought to citizens. The fall of industry in Bakar is thus defined as a good start. Deindustrialisation is seen as a way to achieve desired futures based on the potentials of living on the Mediterranean coast. However, the shadow that looms over current urban prospects is again the one of socialist industry, which produced the long-term environmental pressure.

While the demolition of factories is sometimes seen as a sign of urban progress and redevelopment in neoliberal urbanism, especially from the top of the political and economic hierarchies (cf. Clarke 2017: 118), its meanings can change if we take into account the perspectives of former workers and residents of deindustrialised neighbourhoods. From their points of view, in some cases the factory sites are seen as places that can be redeveloped. For some, they are nothing more that devastated and emptied spaces that evoke nostalgia. In some narratives, they are treated as the wrong orientations of the past that should be forgotten (cf. Doričić et al. 2020). The concept of socio-industrial memory has thus enabled us to grasp different layers by which the context-specific knowledge of industrialisation is being made. It revealed to us that attitudes towards the industrial pasts, dispersed in a broad range from postindustrial nostalgia to environmental alertness, can be fully comprehended only if we discard a linear cause-and-effect approach to (de)industrialisation. As we have shown in this article, images of former industrial work and life gain and change their current meanings in relation to the present needs, fears and worldviews of postindustrial communities, as well as to the ways in which they envision and move towards alternative, hopefully brighter futures.

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MISLITI GRAD NAKON INDUSTRIJE: SOCIO-INDUSTRIJSKO SJEĆANJE I EKOLOŠKI PROBLEMI

Oslanjajući se na etnografska istraživanja dvaju postindustrijskih gradova u Hrvatskoj, Siska i Bakra, autorice analiziraju kako zajednice prikazuju svoju industrijsku prošlost, nose se s njezinim ekološkim posljedicama i vide potencijale postindustrijskog urbanog života. Rad se usmjerava na različite naracije i prakse kojima bivše industrijske zajednice pridaju smisao procesima industrijalizacije i deindustrijalizacije. Lokalno razumijevanje (post)industrijskog urbanog života zahvaća se konceptom socioindustrijskog sjećanja. Taj pojam polazi od stajališta da zajednice mogu imati različite ideje o sličnim društveno-ekonomskim procesima, ali istodobno upućuje na to da je proces industrijalizacije bio politički diktiran kao čin socijalističke modernizacije. Autorice detektiraju i tumače zajednička obilježja, kao i razlike u stvaranju dvaju postindustrijskih gradova, pri čemu naglašavaju važnost kontekstualnog interpretiranja takvih transformacija. U obama istraživanim gradovima zatvaranje tvornica ostavilo je stanovnike bez gospodarskih temelja. U Sisku je deindustrijalizacija značila dugotrajnu nezaposlenost, što je potaknulo postindustrijsku nostalgiju. S druge strane, za građane je Bakra socijalistička industrijalizacija ekološka prijetnja i odmak od razvojne strategije zasnovane na turizmu. Autorice zaključuju da slike industrijske prošlosti mijenjaju svoja značenja u odnosu na sadašnje potrebe i strahove postindustrijskih zajednica, kao i na njihove vizije alternativne, potencijalno svjetlije budućnosti.

Ključne riječi: postindustrijski grad, socioindustrijsko sjećanje, okolišne promjene, Sisak, Bakar