The Social Life of Resilience: From Techno-Politics to Socio-Environmental Justice

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The discourse of resilience is typically imposed in a top-down manner by powerful actors such as states and development agencies. Critics of this use of the discourse have pointed out that the implementation of policies aimed at increasing resilience can be overly technocratic and expert-driven, infused with neoliberal values, and shifts the risk of dealing with climate change to vulnerable populations. While acknowledging these critiques, in this paper I ask how various actors, especially those who lack the power to impose it on others, deploy the concept of resilience to fight for their aims. I focus on the question of resilience in the domain of flood risk in Belgrade, Serbia, in which concerns around overdevelopment and environmental destruction find their expression. I examine how resilience becomes a part of a constellation of terms (including climate change, green infrastructure, investors' urbanism, etc.) whose importance can be amplified as they move back and forth between the worlds of engaged scholarship and of the lay audience. Instead of being a part of an "anti-politics machine" apparatus, resilience can be a tool that non-state actors can use to (re-)politicize urban planning and make it more sensitive to questions of social and environmental justice.

Keywords: resilience, flood risk, investors' urbanism, socio-environmental justice, Serbia

Figure 1: Promotion of the collaboration between Swamplandia and School of Architecture students on the design project "Belgrade Danube Park". Author: Ognjen Kojanić (2024).

Introduction

The breeze off the river was cooling a group of people leisurely spending their time on the north bank of the Danube in Belgrade, in the area that some called the "Belgrade Danube Park" on a warm September afternoon in 2024 (Figure 1). Several children were playing in the sand and stepping into the shallow water, feeling the gentle waves lap over their feet. Three mutts were running around them, occasionally barking, and a flock of swans was slowly wading along the river's edge. About a dozen of us adults were wandering about or sitting on an assortment of benches and chairs, enjoying the shade of tall poplars, ash trees, and willows that grow bountifully in the Danube's floodplain.[1] We were chatting and having snacks and drinks while we were waiting for a presentation to start.

The event was organized by Swamplandia, a citizens' association (*udruženje građana*) focused on environmental issues in the Pančevo Marshes (*Pančevački rit*), primarily in the area called Krnjača (Figure 2).[2] The peaceful scene in which it took place was quite different from an episode from Swamplandia's history when the activists

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1   For a rich description of another area in Belgrade that the Danube seasonally floods, see Prokić (2025).
2   This group's name, as well as the names of individuals, have been anonymized to protect their privacy.
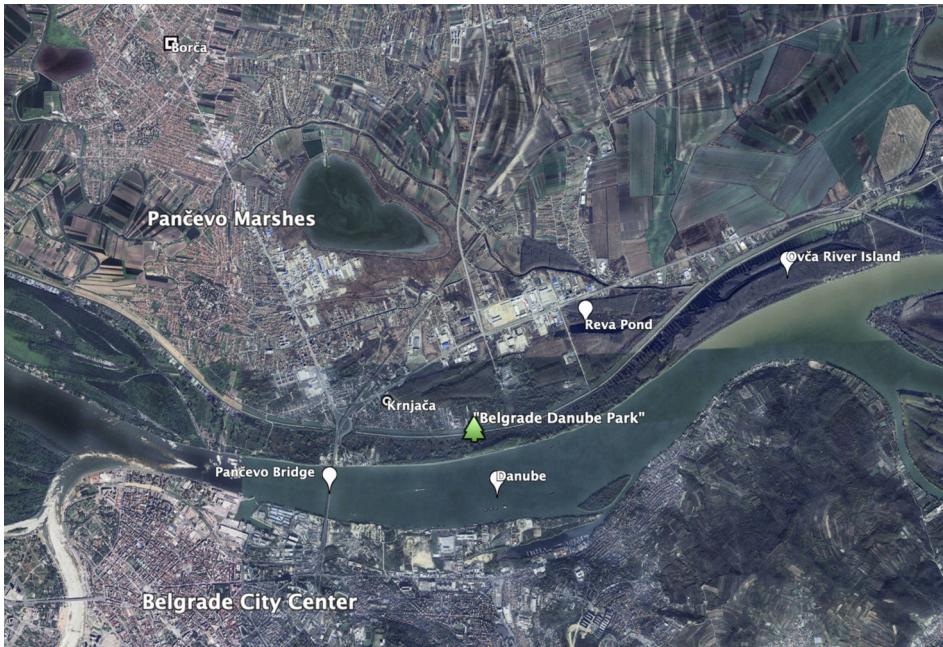
Figure 2: Map of the "Belgrade Danube Park" and surrounding areas. Map data: © Google.

had to physically defend an ecologically sensitive area from landfilling that would devastate it. Although the serene summer afternoon appears to be in contrast with the highly conflictual field of environmentalist activism in the context of Belgrade's urban development, the discussion below will make clear that it is a continuation of urban environmental struggles using other means.

The presentation that we gathered to see, and which started as the sun was setting, was about the collaboration between Swamplandia and the School of Architecture at the University of Belgrade aimed at protecting this area from the type of urban development that critics describe as "investors' urbanism". Within the course "Ecopolis", architecture students were tasked with envisioning the space around Reva Pond (*Bara Reva*) and the Ovča River Island (*Ovčanska Ada*) as a public green space, "Belgrade Danube Park", with three zones characterized by varying levels of environmental protection and access.

Miloš, the professor of urban planning who supervised his students in this activity, introduced this collective project as guided by the idea that there was an urgent need to achieve ecological resilience (*ekološka otpornost*) in cities. This need was exacerbated in Belgrade by climate change, which was bringing prolonged periods of drought and more intense bouts of precipitation, among other changes, and by negative anthropogenic activities, including rampant and unplanned urban development. He explained that wetlands are very important for ecological resilience, asserting the necessity of their protection in Belgrade. Maintaining and strengthening

green-blue corridors and ecosystems along the rivers were stated goals in Belgrade's policy documents but were not implemented, which resulted in permanently devastated areas on the riverbanks.[3]

The definition of resilience employed by Miloš and his students pragmatically connected the need for ecosystem protection with the ability of people to access and enjoy protected areas, thus contributing to social resilience (*društvena otpornost*). In Miloš's view, opening those areas to select human activities would inspire the users to protect them when they are endangered. Sandra, an activist from Swamplandia, added to Miloš's point by saying that she and other activists would either manage to create the Belgrade Danube Park or witness the destruction of this area, which was endangered by the formation of gravel exploitation sites, landfilling with construction debris, and the construction of warehouses and restaurants in which wedding parties are held (for similar proposals to develop other ecologically sensitive areas along the Danube in Belgrade see Kojanić, 2024; Prokić, 2025).

This vignette illustrates how the promotion of resilience intersected with the need to reorient the course of urban development away from investors' urbanism, which was seen by critics as detrimental for ecologically valuable and sensitive landscapes. In this article, I focus on concerns about overdevelopment and environmental problems as they find their expression in relation to the question of resilience, especially in the domain of flood risk in Belgrade, the capital and largest city of Serbia. The article is part of a broader research project on infrastructure and human-environment relations in Belgrade, in which I have followed the work of Swamplandia and other similar organizations since 2019. I have conducted participant observation in the Pančevo Marshes on numerous occasions (joining cleanup actions, assemblies, public events, and neighborhood walks) and interviewed members of Swamplandia and other groups, citizens of the Pančevo Marshes, as well as scholars who study it and people who work in public utility companies in charge of infrastructure in this area. In this article, I analyze ethnographic data gained through participant observation and interviews, as well as documents and secondary literature, to answer the question of how various actors in Belgrade, especially those who lack the power to impose it on others, deploy the concept of resilience to fight for their aims.

In the next section, I present a brief overview of literature on resilience. Then, I analyze the way resilience is deployed as a concept in scholarship on urban planning and adjacent disciplines in Serbia. Finally, I examine to how resilience appears in grassroots activism. I describe Swamplandia's work as an example of how the notion

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3 Green-blue corridors are ecological networks in which various "green" spaces, such as forests and meadows, and "blue" spaces, such as rivers or ponds, are interconnected, allowing movement between isolated habitats. Strategic planning documents (e.g., *The Program of Environmental Protection for the City of Belgrade*) employ this and similar terms to refer to the need for protection of various habitats and biodiversity within them, however, they tend to be disregarded in practice (Čepić et al., 2024).

of resilience can allow scholars and activists to engage in dialogue and act together. The article shows that resilience has become a part of a constellation of terms including "green infrastructure", "climate change", "investors' urbanism", etc. The importance of these terms can be amplified as they move back and forth between the worlds of engaged scholarship and of the lay audience. Instead of being a part of an "anti-politics machine" apparatus (Ferguson, 1990), I argue that resilience can be a tool that non-state actors use to (re-)politicize urban planning and make it more sensitive to questions of social and environmental justice.

Resilience in Critical Social Science Literature

The notion of resilience has proliferated across many disciplines and practical fields. A common critique is that it has become a widespread buzzword that does not have a unified normative meaning. Some scholars, such as spatial planners, have incorporated it deeply in disciplinary theorizing and practice. Others, including many anthropologists, have critically interrogated it rather than operationalizing it as an analytic (but see Bollig, 2014). As the following discussion will show, in the domain of urbanism and urban governance in the context of climate change, which I primarily focus on in this article, resilience has been critiqued as technocratic and expert-driven, infused with neoliberal values, shifting the risk of dealing with climate change to vulnerable populations, and redefining nature as infrastructure. However, social scientists have also pointed out the subversive potential of resilience and how it is applied on the ground to enable collective thriving, which is the line of argumentation to which I contribute with my analysis in the following sections.

As critics of resilience argue, this concept should not be normalized despite its ubiquitous nature. On the surface, it is difficult to be against the notion that cities or infrastructures should be resilient. The notion is so widespread, write environmental planning scholars Iain White and Paul O'Hare (2014), that being against resilience is akin to being against "progress" or "sustainability". And yet, rather than being universally accepted, resilience policies proposed by experts are frequently at odds with those that might be endorsed by the public. Engineering agendas dominate in matters of dealing with risk, whereby contingency and recovery plans are developed instead of working on averting risk. Technorational narratives, according to these authors, "argue against the collectivisation of risk, undermining principles of welfare universalism and promoting the individualisation of managerial strategies" (*id.*, 946). Resilience policies thus often appear as postpolitical and socially regressive. White and O'Hare conclude that in resilience's current iteration, technorational rather than sociocultural approaches are dominant, which reduces the power of resilience to lead to a deep transformation.

The notion of resilience is often seen as dovetailing with neoliberal principles. Both Crawford S. Holling, who developed the concept of resilience in ecology, and

Friedrich Hayek, the Austrian economist who profoundly influenced neoliberal thinking, were interested in "questions of epistemic limits to prediction and assertions of ecological limits to growth" (Walker & Cooper, 2011, p. 144). Their two perspectives, although originally informed by antagonistic concerns, merged in the understanding of resilience as a response to crisis.

Political theorists Brad Evans and Julian Reid (2013) argue that this convergence of ecological concerns and the neoliberal view of society in the notion of resilience has important consequences: instead of believing in the ability to change the world through politics, the contemporary subject must accept the omnipresence of threats and danger, and learn to continuously adapt to them. The way resilience is employed depoliticizes deeply political processes, as evidenced by a trove of work on disasters (Barrios, 2016). This line of analysis echoes James Ferguson's (1990) view of development discourse as an "anti-politics machine", whereby politics appears to be evacuated from various domains of development while simultaneously particular kinds of political power are expanded.

Analyses of policies aimed at responding to climate change through developing resilience show that these processes shift the burden of preparedness from states to individuals. Focusing on a resilience project led by an international organization in Bangladesh, anthropologist Jason Cons (2018) shows that the logic of such projects is often geared towards helping vulnerable populations fend for themselves. Many organizations engage in the promotion of more or less spectacular projects, such as the "climate-smart integrated house" he analyzes, which are supposed to help people survive the chaos of climate change in the places they inhabit. This and other similar technological solutions are supposed to exemplify a techno-optimistic narrative that anthropogenic crisis can be managed in peripheral places, which is especially important for donors and other concerned individuals in the Global North.

Furthermore, governance in the Anthropocene uses resilience to respond to novel challenges such as climate change (Wakefield et al., 2020). Resilience projects even seek to define nature as infrastructure, employing biological processes to manage risk. For example, one major project in New York City aims to deploy oysters as critical infrastructure that can protect the city from storm surges, rising seas, and flooding. In her analysis of this case, geographer Stephanie Wakefield argues that oysters are assigned a role that demands them to live lives structurally similar to humans' lives under neoliberalism, characterized by crisis and productivity, surveillance and security (2020, p. 777).

As the discussion so far shows, anthropologists and other social scientists have primarily critiqued the genealogies of resilience and the contradictions and shortcomings of its implementation. In these critiques, the implementation of resilience policies imbricates social and natural, technical and material as a form of techno-politics (Mitchell, 2002). In the process of formation of such techno-politics, new state initiatives adopt a technological form that frequently appears depoliticized. However, I argue that it is as important to show how resilience can also subvert

neoliberal projects or offer novel paths for collective thriving. To do so, it is important to study ethnographically "the lived experiences, strategies, and narratives that circulate 'on the ground' and are used, changed, and adapted in relation to environmental changes that require a response", or "situated knowledge and practices of resilience in different times and places" (Eitel, 2023, n.p.). Along these lines, geographer Kevin Grove studies Jamaican practices that employ the hegemonic discourse of neoliberalism to "sustain a space in which alternative practices of community, development and resilience might be practised" (2013, p. 208). Although these practices of "subversive resilience" are fleeting and ephemeral, he describes them as potential foothold for opposing the overarching problems of Jamaican political economy. Similarly, Jason Cons highlights grounded versions of resilience in Bangladesh that hint "at an optimistic vision of a future where resilience might be defined not only by remote spatial imaginaries and distant audiences alone but also by peasants working in communitarian ways to collectively secure access to water, land, seed, and life" (2018, p. 286).

Resilience, as many have noted, is a multivalent term. Some of its meanings will contradict others, and so will some practical implementations. In the following section, I turn to examining how the notion of resilience and associated terms travel within academic circles in Serbia. Then, I examine the dialogue between academia and the lay public, as exemplified by the work of Swamplandia, to show how resilience in this context becomes a tool that non-state actors use to repoliticize urban planning and make it more sensitive to questions of social and environmental justice.

Expert Views of Resilience in Serbian Urban Planning and Adjacent Disciplines

The concept of resilience (*otpornost*; *rezilijentnost*) is prominent in several disciplines and fields of practice in Serbia.[4] In this section, I focus on the understanding of the term resilience in urban planning and adjacent disciplines, such as landscape architecture and geography. I track how the term is defined and connected with a constellation of other terms (*e.g.*, climate change, green infrastructure, risk, investors' urbanism). I show that this constellation of terms is usually understood to represent a toolbox for responding to climate change, which authors present in order to influence policymakers to adopt these notions and incorporate them more coherently and consistently in existing and future policies. I end the section by

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4   Resilience has many meanings depending on the context spanning from the psychological and social resilience of individuals or communities to narrowly technical aspects such as the resilience of embankments to erosion. Furthermore, critical assessments of the notion have also started appearing in literature (Janković, 2024; Munitlak Ivanović & Mitić, 2016). Discussions of the concept beyond the field of urban planning and adjacent disciplines are beyond the scope of this article.

discussing scholarship that approaches resilience in the broader context of urban development in Belgrade more critically by developing the term investors' urbanism to describe the specificity of the Serbian context. This term allows scholars to critique the dominant position of investors in the process of urban development.

The genealogy of the notion of resilience that is relevant for the fields of urban studies and urban political ecology can be traced to a policy analysis, namely the *Climate Vulnerability Assessment - Serbia* published by World Wide Fund for Nature in Serbian and English, which was influenced by international discussions about climate change. This report advocates for "the preservation of greenways, waterways, parks, smaller green spatial units, and green corridors in the nature, but also in rural and urban areas" as important aspects of building resilience. It situates the term resilience in the context of climate adaptation in the domain of biodiversity pointing out that it is possible to "improve ecosystem resilience to climate change and preserve vital ecosystem services" (Sekulić et al., 2012, p. 52). Ecosystem services include various processes that natural systems can perform and that are of use for humans, from fundamental ones such as nutrient cycling and soil formation to directly useful ones such as food production or flood control.

This report thus sets up the connections between terms such as climate change, resilience, biodiversity, and ecosystem services that are important for practitioners and activists. The ecological approach in the context of climate change has shaped the understanding of resilience in urban planning, as evidenced by similar recommendations that can be found in many other reports and papers as the term travels across disciplinary boundaries of life sciences to fields with more practical applications. Much scholarship on resilience presupposes the necessity for this term to be implemented in various levels of governance and offers assessments of the current level of adoption of the term resilience in official documents, such as the draft *Master Plan of Belgrade 2041*, which was publicized in 2022. The draft's development vision posits Belgrade as "an efficient and resilient city", tying this to the significant challenge that climate change poses to the city's development and consequently setting climate adaptation as an important goal (Ivanović et al., 2024, p. 370).[5] However, the draft did not envision a way to track the consequences of existing elements of urban planning practice for climate mitigation. Other critical accounts have also noted that planning documents are not sufficiently coherent in their approach to resilience, climate mitigation, sustainability, and other stated goals (Čepić et al., 2024). Climate change and resilience are judged as low on the list of priorities of many communities in Serbia urging the development of "a more sensitive model of resilience to climate change" (Protić et al., 2019, p. 12).

Although the term resilience has yet to be consistently included in spatial planning practice, it is already quite prominent in urban planning theorizing. For example, in one paper urban planning scholars Aleksandra Stupar and Ivan Simić define

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5   All translations from Serbian are mine.

resilience as cities' "ability to resist and adapt to existing and forthcoming consequences of climate change" (Stupar & Simić, 2018, p. 225) and see it as "crucial for the realization of long-term sustainable development" in the face of climate change and other risks (*id.*, 232). For Stupar and Simić, it is necessary to connect the notion of resilience with the normative aspect of sustainability to direct "planning and design activities toward the goals tied to desired future sustainable states of a system" (*id.*, 233). Therefore, they conclude that practical considerations in urban planning need to consider sustainability and resilience goals in dialogue.

Climate change is thus seen as a challenge to sustainable urban development. Urban planning scholar Jelena Živković and her collaborators (Živković et al., 2015) write that urban greenery is important in the fight against climate risks, including droughts and floods. Accordingly, open space in urban environments should be rethought to respond to the consequences of climate change. For example, rivers in Belgrade create a risk of floods – none more so than the Danube, which used to regularly inundate low-lying areas introducing various disturbances in the socio-environmental contexts along its course (see Dorondel & Gatejel, 2025a). Nowadays, flood risk is increasing due to rising winter precipitation and more intense precipitation events. In response, city planners can employ measures such as preserving open spaces and using "green infrastructure" to store excess water (Živković et al., 2015, p. 106).

Green infrastructure figures as an important concept in these discussions. Scholars typically use the definition of green infrastructure provided by the European Environment Agency in relation to the European Commission's document *Green Infrastructure (GI) — Enhancing Europe's Natural Capital*: "Green infrastructure is a strategically planned network of natural and semi-natural areas with other environmental features designed and managed to deliver a wide range of ecosystem services such as water purification, air quality, space for recreation and climate mitigation and adaptation" (European Environment Agency, n.d.). A group of Serbian landscape architects explained the need to use green infrastructure solutions more widely to reduce vulnerability and increase resilience to extreme weather and natural catastrophes (Cvejić et al., 2014, p. 52). To avoid loss of life and material destruction from events such as floods, they advise "preserving and improving functional floodplains, riparian or protective forests in mountainous areas, and wetlands that can, in combination with other infrastructure, be in the service of efficient reduction of possible consequences of catastrophic events" (*ibid.*). As an additional justification for expanding green infrastructure, they list the multiple benefits (*koristi*) of natural ecosystems, such as "carbon sequestration, filtering and storing water. Additionally, they also have aesthetic and recreational functions, that is, they play a role in raising the quality of life, although that contribution cannot be easily quantified" (*id.*, p. 54). The authors conclude that Belgrade must follow European policies in the domain of green infrastructure by incorporating this element of dealing with climate change into its strategies, planning documents, and practices.

In a different article, the same group of authors discusses the need to preserve wetlands in floodplains, which reduce the risk of flooding and retain water reserves during summer droughts in the context of climate extremes that include wetter winters and more intensive precipitation (Cvejić et al., 2013). This is in line with recent approaches to flood mitigation, which suggest that societies should find ways to live with rivers by allowing them to take up space instead of imposing infrastructural constraints on them, such as dikes and dams (Dorondel & Gatejel, 2025b). To enjoy ecosystem services, Cvejić and colleagues claim that open spaces in the urban fringe zone need to be preserved. They propose several necessary measures, such as protecting wildlife habitats, preserving biodiversity and ecosystem diversity, enabling the development of ecologically resilient and diverse landscapes, and restoring degraded landscapes such as riverbanks and wetlands (Cvejić et al., 2013). These discussions of resilience and related concepts go beyond theoretical discussions among urban planners. Rather, scholarly ideas get transmitted to the wider public through outreach activities and writing for lay public, which I will discuss in the following section.

The premise of scholarship discussed so far is that policymaking should more consistently implement the toolbox for responding to climate change that includes the constellation of terms like resilience, sustainability, green infrastructure, ecosystem services, etc. However, most scholars rarely discuss the conditions that shape urban planning practice in Serbia and limit the adoption of these notions. A handful of critical scholars have reflected on problems in the application of resilience and other terms. Some identified problems in the administrative domain, i.e., how decisions are made and how rules are implemented by state agencies. For example, one article approaches the institutional architecture of urban planning in Serbia as top-down and "technocratic and exclusively expert-based in most cases" (Mitić-Radulović & Lalović, 2021, p. 2). The authors describe the tentative possibility of changing such a system due to the pressure of "civic unrests and political tensions" or "climate crisis and excessive pollution" (*id.*, pp. 12–13).

Some scholars go even further and adopt a highly critical account that focuses on more systemic historical-materialist contradictions of the current political and economic system in Serbia. These critical scholars characterize the current state of urban planning as investors' urbanism, by which they mean that investors' interests, primarily profit seeking, are favored at the expense of public interest in the process of planning new residential and business structures in the city (Simić, 2022). According to such analyses, urban planning in Belgrade is influenced by neoliberal urbanization; it is characterized by processes of privatization and deregulation of urban planning, centralization of the decision-making power, and exclusion of the public from decision-making and urban planning (Stojić, 2024).

The critics of the current practice of urban development identify neoliberal urbanization as one of the drivers of the loss of green spaces in Belgrade (Stojić & Andrić, 2024). They explain that, as land becomes commodified and its value is

primarily realized through profitable construction projects, green spaces are increasingly replaced with commercial and high-end residential objects (*id.*, p. 64). The existing plan to increase urban greenery is stripped of its mandatory quality. While it posits a significant increase in urban greenery as a goal and details proposed locations and means for achieving it, in practice it leaves it up to the investors to decide whether they will follow such recommendations or not in what urban planning scholars Božena Stojić and Olga Andrić consider a case of "regulated deregulation" (Peck & Tickell 2002, cited in Stojić & Andrić, 2024, p. 66). Polling shows that a significant majority of Belgraders want to have more greenery, yet this is not reflected in the broad trajectory of urban planning practice. One of the most frequent reasons for grassroots political organizing on the neighborhood level is the reduction in green spaces (Andrić, 2024).

The critics of such trends in urban planning in Belgrade recommend a more meaningful incorporation of the public in urban planning through innovative methods that can enable their substantive participation at various points in the planning process (Mitić-Radulović & Lalović, 2021; Simić et al., 2024). Several civil society organizations, such as New Planning Practice (*Nova planska praksa*), the Ministry of Space (*Ministarstvo prostora*), and Center for Experiments in Urban Studies (*Centar za eksperimente i urbane studije*), have been running programs aimed at educating the public about urban planning, empowering citizens to act in relation to their neighborhoods, and democratizing the practice of urban planning. In the next section, I will examine how these critiques of urban planning find their expression in environmental activism by focusing on Swamplandia's activities.

Beyond Academic Discussions of Resilience

On May 22, 2024, Swamplandia organized an event on the Danube floodplain in Belgrade to mark the International Day for Biological Diversity. In what follows, I analyze this event in detail to show how the notion of resilience and the constellation of related terms I discussed in the previous section can be amplified in the dialogue between academics, on one side, and activists and the lay public, on the other side. The event was prepared in collaboration with a local university that has a program in environment and sustainable development. Marta, a teaching assistant in that program, brought a group of students to take part in an outdoor class relevant to their studies. She was also a speaker, alongside Bogdan, a biology researcher, Miloš, an urban planning scholar, and Sandra from Swamplandia.

Marta gave a brief lecture on the importance of biodiversity protection. She spoke about the need to protect not only the diversity of species, but also of ecosystems. As an example of a threatened ecosystem, she pointed to the pond behind her and the swampy terrain (*močvarna područja*) surrounding us. "An aquatic ecosystem, especially those wetland areas, marshy areas are of great importance for many

Figure 3: The International Day for Biological Diversity event organized by Swamplandia. Author: Ognjen Kojanić (2024).

reasons. That is because they offer us numerous ecosystem services", she explained. In a back-and-forth, Marta and her students listed several ecosystem services. When they arrived at climate change mitigation, she pointed out that "swampy terrains play an important role because of swampy or aquatic vegetation, which includes hydrophilic species, like trees (willow, poplar, ash, alder), then marshy vegetation (reeds, bulrush, sweet flag, and so on)", all of which store carbon dioxide from the atmosphere. Further, she mentioned that marshy landscapes "also mitigate flooding by acting as a 'biosponge', holding excess water during heavy rainfall".

Bogdan, the biologist, reiterated the point about the importance of protecting ecosystems rather than individual species, saying "Quite often, we protect marshy ecosystems because of the high diversity of some of these species, when in fact we should protect them because of the really numerous other ecosystem services they grant us". Sandra linked the discussion of ecosystem services with the challenges of their neighborhood, primarily the pollution from nearby industrial facilities that release their wastewater into the canal network in the Pančevo Marshes. She pointed out the value of preserving the ponds (*bare*) along the Danube: "if there weren't these ponds that somehow filter that water, everything would end up in the Danube". Since Belgrade does not have a wastewater treatment plant, she viewed these ponds are crucially important, saying "if they destroy the little bit of nature

and the little bit of natural technological services, then we are completely poisoned" (*zatrovani*).

Marta added to that point, saying that wetlands are important for four UN sustainable development goals, including sustainable cities and communities. She referenced the cooperation with the School of Architecture, with which I opened this article, "to see how we can make a harmonious Belgrade, a green Belgrade, which will preserve these ecosystems and incorporate them into its urban planning, because the general trend is that cities are abandoning their wetlands, their riverbanks, since they have understood that it is way more useful to them if they let nature go on there. If that is a natural landscape, it is far more useful than if we use that space for our profit-seeking needs".

Miloš, the urban planning scholar, explained the framework of development in Belgrade, where strategic documents envision the protection of riverbanks and their surrounding wetlands, but the strategies are not put in practice in the domain of environmental protection. He emphasized the importance of local associations defending their local interests and simultaneously defending the whole city's interests: "I think that can be the solution, that everyone in their local area protects the greenery and that they do not let construction take place and endanger it."

By quoting extensively from the conversation that took place at this event, I wanted to show how the participants made links between the notions I discussed in the previous section. In fact, they echoed and were informed by the scholarly discussions, but grounded in the arguments from ecosystem biology and environmental protection. Although some of the terms were not referenced explicitly, their meaning was present in the discussion implicitly. The point about ecosystem services was especially important in making the case for the need to protect wetlands in order to improve flood resilience. The speakers were critical of what they called the anthropocentric view of the world, in which man and nature are separate and distant. Instead, they argued for the need to see "ourselves as part of nature" and to understand that nature can exist without us, but we cannot exist without nature. And yet, their strong emphasis on ecosystem service was one of the main arguments in favor of biodiversity protection.[6]

Several months after the event, I was sitting with Sandra from Swamplandia, the main organizer of the event. She was telling me that she too was ambivalent towards the idea of ecosystem services. She explained the reasoning behind the pragmatic use of the concept by Swamplandia: "Ecosystem services are, in principle, that which

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6   Focusing on ecosystem services has often been criticized for introducing a neoliberal logic in environmental policies as proponents of ecosystem services rely on market logics to calculate the value of ecological processes for humans (e.g., McAfee & Shapiro, 2010). However, the commodification of nature never proceeds unquestioned as valuation of nature is a complicated process (see Kojanić, 2024). The introduction of ecosystem services creates tensions as well as possibilities in the process of neoliberalization (for a critical review see Dempsey & Robertson, 2012).

nature does for man. To make what nature can do visible and explain it to people, you really must sometimes use such facts and figures. That is how I see it. You know, if we started talking to someone about bugs and trees having the same rights as us, not everyone will 'swallow' that story." In other words, terms such as "ecosystem services" are used strategically by activists and scholars. Aware of the problematic nature of such terms, which can reinforce the understanding that humans are exceptional, they opt to use them in the struggle for environmental protection and as a powerful argument against rampant urban development characterized as investors' urbanism.

Swamplandia has been engaged in a years-long struggle for the protection of wetland landscapes. The audiences at Swamplandia's events are partly attracted by that long-standing fight. Although the events frequently include academic speakers, the audiences are not academic; rather, they include Swamplandia members' neighbors from Krnjača and other activists interested environmental conservation in the Pančevo Marshes and beyond, but also those who simply want to enjoy green spaces. Scientific knowledge about endangered areas that is presented on these occasions is appreciated as providing arguments that can bolster the struggle for conservation. At this and other events I attended, there were discussions about the environmental protection of various sites endangered by development plans in Belgrade (*e.g.*, Zvezdara forest and Milićevo Brdo across the Danube, or river island Veliko ratno ostrvo at the confluence of the Sava and the Danube) or elsewhere in Serbia (*e.g.*, the Studenica River or the Jadar Valley).

The attendees who discuss these issues are inspired by Swamplandia's history, including the event that gave the group its prominence, namely the physical blockade of the effort to convert the area around Reva Pond into an industrial zone in 2021. The official plans for the zone included a landfill where construction debris would be disposed. The goal of the plan was to establish a second location for "Free Zone Belgrade", *i.e.*, an area where economic activities can be performed with incentives, including no taxes, tariffs, or fees for certain activities (also called special economic zones or free trade zones elsewhere). The landfill was planned even though the Detailed Regulation Plan for this zone acknowledges the ecological importance of the area, stating that 71 per cent of it belongs to the "internationally important Ecological Network of the Republic of Serbia". The document goes on to note that Reva Pond is a habitat for 118 flora and fauna species, including forty-four that are protected, and that the wider area includes a swampy forest and riparian undergrowth with "138 flora and fauna species, of which 22 fauna species are on the Red List of Threatened Species" (Službeni list Grada Beograda, 2018, p. 6).

In other words, the city government had "decided to put all the worst things in the most beautiful area", as Sandra phrased it in a conversation with me. The plan to establish a free trade zone can be seen as a local version of investors' urbanism, whereby profit-seeking behavior is prioritized in urban development at the cost of all other social interests. Swamplandia activists mobilized fellow citizens to prevent

the landfilling. Reva Pond, its defenders always point out, is a biodiversity hotspot inhabited by many species, including the Danube newt and the white-tailed eagle, the European fire-bellied toad and the European tree frog, the otter and the soprano pipistrelle, and many others. Eventually Swamplandia and its allies stopped the plan, but not before thirty hectares of the pond and its surrounding forest were landfilled.

Stopping the harmful activities was seen as potentially temporary, and therefore Swamplandia activists decided to change their tactics. In addition to vigilance in making sure landfilling does not restart, they wanted to double down on explaining their positive vision for this area. Over the years, Swamplandia has organized cleanups, a tree-planting event, and birdwatching excursions, among other events, to bring visitors to this area. These events were supposed to allow the visitors to experience the area firsthand, to enjoy the beauty of its biodiversity and serenity so close to the city center, but also to become acquainted with its problems. In doing so, the goal of these events was to create a constituency interested in preserving the wetlands in this area as a public space and eventually a nature park.

The presentation of the work by students from the School of Architecture in collaboration with Swampladia on the Belgrade Danube Park, which I discussed in the opening vignette, was an outcome of many years of thinking about the possibilities of this space for building the connection between people and the natural environment, and incorporated scientific knowledge about it that Swamplandia members consider as the basis for its conservation. The students who worked on the designs emphasized this connection. As the professor Miloš explained, ecological resilience requires social resilience, and therefore a resilient system cannot exist without people. For him, ecological resilience will be achieved if "the right people are at the right place, so the people who live here would defend this area because they are conscious, educated, and so on".

The approach taken in this collective project responds to the needs of the people who live near the potential Belgrade Danube Park and their everyday problems. At Swamplandia's events, Sandra talked about numerous problems that this local community experiences, as illustrated by the quote on pollution from her speech on International Day for Biological Diversity. Much of this wider area, usually called "the left bank of the Danube" (*leva obala Dunava*), is polluted, covered in "wild garbage dumps" (cf. Kojanić, 2022). As she put it, whenever people do not know what to do with their waste, they come to the left bank and dump it there. At the same time, the inhabitants of this area lack infrastructure that would enable them to live good lives. The children lack safe and sanitary playgrounds; Sandra's own child "is playing soccer on a field next to an outlet where fuel oil is dumped directly into storm sewage". A major part of her motivation for the creation of the Belgrade Danube Park is to create a place where her and her neighbors' children can spend quality time, which echoes Miloš's point about the need for strong social relations to a place to underpin ecological resilience.

Thus, frustrating investors' urbanism by blocking the development of this area through grassroots action is presented by Swamplandia's activists as beneficial for the city, for the environment, and for the local community. The city would benefit from increased resilience to flooding because the wetlands would provide it ecosystem services. From the perspective of the environment, the wetland landscape would be protected from unplanned development that could devastate the already jeopardized environment further. Finally, the local community would benefit from having improved infrastructure and more sustained attention to their needs.

Conclusion

In this article, I traced how ideas about resilience can move beyond academic and techno-political discussions and be taken up by activists and lay audiences to advocate for their own interests. In addition to arguing for the need to increase resilience to flooding through the protection of the wetlands along the Danube's north bank in Belgrade, Swamplandia's idea to establish the Belgrade Danube Park also offered a positive vision for the people who live in its vicinity. Thus, the idea was presented as a win-win-win scenario: positive for the city, the environment, and the local community.

While resilience policies have been criticized as predominantly imposed top-down by engineers and policymakers (White & O'Hare, 2014), the case study I focused on showcases that terms such as resilience can gain a social life of their own, which does not necessarily entail the same type of adverse consequences such as the promotion of neoliberalism (Barrios, 2016; Cons, 2018; Wakefield, 2020). Instead of depoliticization, the case of Swamplandia's struggle against investors' urbanism and their idea for the Belgrade Danube Park shows that resilience can be used as a tool to repoliticize urban planning and make it sensitive to questions of social and environmental justice.

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