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IVANA STEPANOVIC

TWEETSTORMS AND POLITICS OF ALGORITHMIC VISIBILITY: PRECARIOUS ONLINE LABOUR OF ECOLOGY ACTIVISTS AND CLIMATE INFLUENCERS IN SERBIA

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ABSTRACT

Eco activism in Serbia and the rest of the world relies on the use of hashtags. In the semiosphere of the internet, they appear as algorithmic signifiers that are determining the visibility and distribution of digital content, but they also migrate to the physical world where they occasionally get transformed into powerful political slogans. From protest banners to tweetstorms, hashtags are the tools of resistance that are at the same time empowering and disempowering. They allow the dissemination of ecology activist narratives in the sphere of social media, but at the same time, they lead to the exploitation of activists as digital workers. Social media persistently undermine their own democratic principles by imposing algorithmic organisation of visibility which relies on data surveillance and rigorously adheres to the logic of the market and digital prosumption. This paper investigates how protesters against lithium mining in Serbia use hashtags on Twitter and on street protests to influence political decision-makers while striving to please the algorithms and gain visibility. Digital ethnography offers a unique perspective of the processes of digital prosumption and the role of algorithms in ecology activism that spills over from the realm of social media into physical spaces where activists gather to protest.

Tweetstorms and Politics of Algorithmic Visibility: Precarious Online Labour of Ecology Activists and Climate Influencers in Serbia

Ivana Stepanovic
iASK, Institute of Criminological and Sociological Research

1. Introduction

An algorithm as a method for making calculations has grown to become the organising principle of the fluid architecture of the internet platforms as it determines visibility and ultimately decides what is going to be produced, reproduced, consumed or prosumed and by whom. From world-famous climate influencers such as Greta Thunberg or Extinction Rebellion to Serbia's Ekološki ustanak (ecological uprising), the most followed social media profiles dedicated to ecology activism produce apocalyptic narratives to create a sense of urgency around environmental issues (Harper, 2020; Weston, 2020). Their main tools are hashtags that serve as algorithmic signifiers and are used to label and distribute the content. Compelled to use online platforms, they adhere to the rules of the online market demands and digital production which is based on data surveillance. Whether they are operating as individuals or communities, they are engaged in precarious labour of pleasing the algorithms, working across multiple platforms, self-promotion, or commodification of private data, and adjusting their political ideas to create engageable content. The commodification of personal data and apocalyptic narratives using hashtags appear to be their key strategies to draw attention to ecological problems and achieve algorithmic visibility. These processes are crucial for understanding the phenomenon of prosumption (combined production and consumption), especially in the context of online political participation (Yamamoto, Nah & Bae, 2019: 1885). Ecology activism is largely reduced to "commodified cyberactivism" which involves exploitative practices such as unpaid labour (Daros, 2022). Even when messages about climate change and environmental threats reach traditional public spaces, they are still visibly shaped by digital prosumption. In this paper, I argue that algorithms impact ecology activist narratives both online and offline.

Some existing research work focuses on the phenomenon of climate influencers (Auer et al. 2014; Juliardi et al. 2021; Nicholas and Nielsen, 2021), but there has been little attention to the

problem of algorithmic strategies and precarious labour associated with this type of activism. This research specifically focuses on the use of hashtags in both online and offline eco-activism practices in Serbia. It investigates how activism moves "from Tweets to the streets" (Gerbaudo, 2012), and how specific keywords are conceptualised as hashtags that appear both in social media posts and on protest banners. Impregnated with multiple meanings, these signs circulate from digital to physical spaces and the other way round. This research, therefore, focuses on intertwined online and offline strategies and analyses how eco-activism emerges from digital platforms with the aim to populate streets and ultimately make an impact on the real world. At the same time, the research aims to illuminate the processes of the production of narratives and show how activism adapts to the capital-driven practices on social media. Ultimately, I tried to articulate the tensions between ecology activism and algorithmic organisation principles. I investigated how hashtags on Twitter become protest slogans and how symbols used on banners travel back to social media where they emerge in the form of algorithmic signifiers. The findings show how ecology activist narratives are impacted by the algorithms and are used to mobilise the audiences and influence policymakers. They point toward the advantages and drawbacks of using platforms for activism. Although social media appear as useful tools to gather large numbers of followers and organise grassroots movements, they are also oppressive, exploitative, and misleading.

2. Activists or Influencers?

Activism that unfolds on online platforms is inevitably entangled in the complex processes of digital production, and activists are often indistinguishable from social media influencers. They use digital tools to get more visibility online or in traditional media. They create strategies to reach a wider audience and influence decision-makers but their struggle for visibility in online spaces that are oversaturated with information is a type of entrepreneurship. Activists are forced to brand their ideas and sell them on the digital market just like influencers who are advertising food, cosmetics, or luxury hotels. In addition to being activists trying to change the public discourse, spread their ideas and improve environmental policies, they are also entrepreneurs and diligent prosumers who are at the same time producing, consuming and being a product of their digital labour, just like their followers.

Eco warriors forced to compete in the digital market hyperproduce online content and use multiple platforms simultaneously to advertise themselves and their ideas. Throughout this process, they tweak and tailor the language of activism to the needs of social media. They are forced to modify their messages to adhere to the platforms' algorithms. Because the algorithmic settings are not transparent but rather have a "black box" nature (Pasquale, 2015), their activism inevitably involves research work on the algorithms. Understanding the preferences and criteria for sorting the content online that are secretly embedded into platform algorithms is, in a way, hidden, unpaid labour of any entrepreneur who operates on social media, be it a fashion influencer, private business or an activist who is not there to earn revenue but merely to fight for his or her ideals. The work of ecology activists is therefore precarious because they are exploited by the platforms themselves that use algorithms. The basic principle of these algorithms is the engagement-based ranking which means that they are set to prioritise and give visibility to content that gets more views, likes, and shares. However, making activist content online likeable and shareable is a type of marketing strategy imposed by the platforms themselves. Adhering to this algorithmic logic of organising social media has become an important strategy in practising politics today, and any activism is always supplemented by this profit-driven online activism.

Modern-day activism has digital marketing practices at its very core. The majority of protests or activist campaigns are conceived and articulated online or are using digital tools to reach audiences. This digitalisation of activism has started with the rise of social media and has been exacerbated by the Covid-19 pandemic. Greater movements or individual campaigns that get recognition and substantial following online spill over to the streets and continue to live in the physical realm where hashtags, geotags and other algorithmic signifiers begin to appear on protest banners. In this sense, algorithms are involved in the very creation of narratives and possibly even constitute a "type of rationality that is no longer our own" or "have become the fundamental arbiters of human experience" (Johnson, 2021).

Algorithms use behavioural data to determine how content will be distributed to users. The Covid-19 pandemic has confined climate activism to online spaces (Von Storch et al, 2021) where they started organising social media actions while at the same time using communication platforms like Zoom to organise video call meetings. But in the privately-owned public spaces of the internet, their work is undermined by surveillance practices and the logic of the market. The engagement-based ranking of the algorithms is guiding their activism work towards profit-

driven strategies that require precarious labour (Coyle, 2017) to fit inside the visibility politics (Bucher, 2018; Cotter, 2018; O'Neil, 2016; Petre Duffy and Hund, 2019). Most importantly, social technologies enable distanced social life and transport the traditional public sphere into the online realm. The classic grassroots movements which are typically created in physical spaces (Maiba, 2005) are increasingly replaced by digital activism (Gerbaudo, 2012) which is confined to heavily surveilled online spaces that succumb to the logic of capital and profit-driven algorithmic culture. As a result, there is a proliferation of 'algorithmic activism' as well as 'algorithmic populism' (Maly, 2018; Tere, 2018).

From Tweetstorms to cyber art (Keifer-Boyd, 2021), eco-activists are using hashtags, memes, and other semiotic strategies to express the revolt and share ideas. However, their work involves much more than just being creative. They are working on promoting their ideas online in the oversaturated spaces of social media. While Greta Thunberg has grown to become the most influential climate child warrior, there are millions of little girls who are following her footsteps. Just like her, they are worried about the future of the planet and troubled with eco-anxiety. While protesting against fossil fuels, pollution, nuclear waste or even mass extinction, they are engaged in influencer marketing to get noticed on social media and ultimately change the course of history to save their own and everyone else's lives. Their personal battles for survival and protection of the environment are often belittled and marginalised by the algorithms themselves that are not ranking the content on social media according to its ethical value but purely on its potential to attract the audience.

Since social media algorithms are sorting the content according to their potential to earn revenue, they often throw the activism back into the ideology it is, in fact, aimed against. Ecological activists who are trying to challenge the core principles of the modern economy are compelled to use the same tools they believe are the cause of the problem. In Serbia, for example, ecological movements that are protesting against lithium mining are forced to engage with digital labour on social media to spread their ideas about the preservation of the environment, organise protests or send messages to the government and therefore utilise the very same technologies that create excessive lithium demands.

3. Serbia's War on Lithium: Hashtags against Pollution

While the key political actors in Serbia are advocating lithium extraction and stressing the financial benefits of collaborations with the companies such as Rio Tinto, ecology activists are focusing on the negative aspects of mining. They are collaborating with scientists while trying to communicate the scientifically backed theories and prove that lithium mining is a major threat to the environment and, paradoxically, undermines the whole concept of the green "energy transition"[1]. The link between activism and science is not new or unique to Serbia. It is rather a global phenomenon that is particularly visible in climate change initiatives across the world. The most famous climate activists like Greta Thunberg and activist groups such as Fridays for Future or Extinction Rebellion not only emphasise the importance of scientific knowledge but also use scientific publications to back their claims and ground their campaigns (Rohden, 2021). Consequently, citizens, activists and ecological organisations team up with members of the scientific community to campaign for environmentally friendly solutions. Serbia's war on lithium mining also presupposes this division between the governmental actors on one side and scientists on the other as ecology activists work closely with experts to shape their policy recommendations.

The battle against lithium mining in Serbia is happening on the field, in public spaces, but also in the semiosphere of the internet, and hashtags as algorithmic signifiers play a key role in both spheres. Ethnographic fieldwork that involves participant observation both online and offline shows how selected hashtags evolve to become protest slogans and policy recommendations and vice versa. This research shows how strategies activists deploy to mobilise people and communicate their ideas are deeply rooted in the algorithmic production of narratives as social media influence the language and the nature of their activism.

Digital activism against lithium extraction in Serbia gathers various actors from locals located in potentially endangered rural areas that will be affected by the future mines to members of civil society, scientists and public figures who advocate environmentalist and sustainability ideas. Street protests are entwined with online activities such as tweetstorms, digital petitions, and social media campaigns. Deciphering their messaging is crucial to understanding the

[1] Ministarstvo rudarstva i energetike, www.mre.gov.rs/lat/aktuelnosti/vesti/projekat-„jadar"-razvojna-sansa--odluka-kad-se-zavrse-sve-studije-i-gradjani-iznesu-svoj-stav, accessed on 17. 02. 2022.

impact of algorithms on ecology activist narratives. In this paper, I investigated the hashtags used in various online campaigns against lithium mining in Serbia and observed how they were used on social media and in physical spaces. Field research shows how different hashtags are combined together to mobilise followers and spread the word about protests but also to convey specific messages. I have found two key tendencies that are important for understanding the nature of activist narratives. The first one is that the narratives against lithium mining have crucial references to patriotism. The activists are addressing the local population and trying to convince them that lithium extraction is devastating for Serbian nature and culture. The second tendency is spreading the issue beyond Serbian borders and addressing a wider international community in search of partners and collaborators from other parts of the world. This is why activists are creating protest slogans and hashtags in both Serbian and English language.

#NeDamoJadar (we don't give away Jadar) #SrbijaNijeNaProdaju (Serbia is not for sale) #RioTintoMarsSaDrine (Rio Tinto march away from Drina)
#Litijum (lithium) #Patriotizam (patriotism) #RioTinto
#Brezjak #GornjeNedeljice #Jadar #Azbukovica #Radjevina #Rekovac #Levac (Localities in Serbia targeted for lithium mining)
#Protesti (protests) #ZnamoDaNeDamo (we know that we don't give away) #TiceSeSvihNas (it concerns all of us)
#Serbia #Australia #RioTinto #RioTintoMarsSaDrine (Rio Tinto march away from Drina) #PlaybackForDjokovic #Djokovic
#RudnikNeceProci (You won't get away with the mine) #ZajednoSmoJaci (we are stronger together #Rudnik (mine) #Zakoni (laws) #Nedeljice (locality in Serbia) #Loznica (locality in Serbia) #RioTinto #MarsSaDrine (march from the Drina)
#SerbianLithium #Lithium #RioTinto #Neocolonialism
#Ekocid (ecocide) #Neokolonijalizam (neocolonialism) #RioTinto
#NemaNazad (there is no going back) #NeDamoSrbiju (we don't give Serbia away)
#Priroda (nature) #ekocid (ecocide) #rudnici (mines) #litijum (lithium) #Jadar (locality in Serbia) #ekologija (ecology)

Figure 1: patriotic narratives

Figure 1 shows interlinked hashtags used in 10 representative tweets and demonstrates how these signifiers are used as building blocks that serve two functions. The first one is to tag the content, inform the algorithm and attract the audience on Twitter. The second function is

articulating the narratives. The examples show how activists combine patriotic narratives with ecological, economic, and political messages. Some of the key slogans infused with patriotism include “Srbija nije na prodaju” (Serbia is not for sale), “Rio Tinto marš sa Drine“ (Rio Tinto get off the Drina) and „Ne damo Jadar“ (We won’t give away Jadar). The slogans from the street protests often coincide with hashtags on Twitter. One of the most prominent slogans from protests “Ne damo da Srbija bude kolonija” (We won’t allow Serbia to become a colony) corresponds to the use of hashtag #neocolonialism in relation to the hashtags such as #SerbianLithium or #RioTintoGoHome. Ecology is placed in the centre of the new patriotic and nationalist narratives that revolve around the lithium mining issues. Additionally, hashtags referring to various localities in Serbia that are planned to be mining sites appear in connection to hashtags such as #ecocide that point towards a broader understanding of extraction in the context of green criminology. When the locals from the villages surrounding the future mining sites speak about lithium extraction, they express their concerns for both health of humans and nature, but also about the extinction of their lifestyles closely related to agriculture. They emphasise that lithium mining is a type of ecocide and genocide because they will be forced to leave their land, their homes, and their jobs once their neighbourhoods are turned into mining sites.

In some cases, names of activist groups appear as hashtags such as #NeDamoJadar or #MarsSaDrine, but they also double as protest slogans and focused messages for political actors. For example, #MarsSaDrine is a movement established by Bojana Novakovic, an Australian actress with Serbian origins who coined the phrase that works well as a hashtag, protest banner and a patriotic message addressed at the Serbian government. This phrase is inspired by the Serbian patriotic song from World War I - “Mars na Drinu” (March on Drina). The word game implies that the battle against lithium mines in Serbia is an important historic event and a quest to save Serbian nature, culture, and heritage. In this context, issues of ecology are related to patriotic narratives and the preservation of Serbian identity that is inseparable from agriculture, unspoiled nature and domestic products crafted in rural areas such as Jadar Valley which is targeted by the mining giant Rio Tinto. In one of the television interviews, Bojana Novakovic says: „we are hospitable people, and you can drink our rakija, have a coffee, have some kajmak and burek, but we are not giving you that lithium, so take your extraction

somewhere else“[2]. She is therefore addressing the international companies with a simple requirement to leave Serbia and relocate to another country, but at the same time, she is trying to reach out to the international community and says: „there are activists in Europe who are supporting us and we collaborate with them; since this has become a global problem, we are finding friends all over the world“[3].

On the one hand, Serbian protests against lithium extraction are seen as a national issue. The hashtags in the Serbian language address the local community and focus on the preservation of Serbian nature and heritage. While warning of the dangers of extractivism and consumerism, many Serbian ecology activists juxtapose „us“ and “them”. One of the paradigmatic examples is the protest banner that says „vama litijum, nama otrov“ (lithium for you, poison for us). Implicitly and explicitly, they criticise the contemporary “colonial” practices and claim that Serbia is a modern colony where the developed EU countries can cheaply extract lithium and pollute the land to provide mineral supplies for battery-powered cars and other technologies. In their own way, they are saying that the so-called green transition and trajectory towards independence from Chinese resources are happening at the expense of developing countries in Europe.

Activists in Serbia are talking about the criminal nature of lithium mining that is not clearly defined by the law. They refer to the scientific research projects that show the potentially devastating consequences of lithium mining on the environment and health of people. While government representatives are associating lithium extraction with the economic growth and prosperity of Serbia, they see it as a type of ecocide and source of pollution of soil, water and air that potentially leads to a cancer epidemic. One of the protest slogans reads „ecology or oncology“, implying that lithium mining should be considered a green crime rather than a business opportunity. Their patriotic narratives are dominating the semiosphere of Twitter and other social media, but they occasionally recognise that the problem is endemic and global. Some activists are stressing that pollution caused by lithium mining transcends borders and affects the whole world. This is why they often communicate in English and Serbian while trying to reach out to sympathisers in Serbia and the rest of the world. Using hashtags in English, they hope to get attention from international mining companies, but also politicians and ecology activists from the outside who could help them battle against lithium mining. On

[2] Nova S (21. 01. 2022.) Bojana Novaković: Tek sam počela, borba za prirodu se nastavlja, www.youtube.com/watch?v=Z-VdNVpknPE&list=PLZXr2RpggkrydaN61S8j8zx6DyBc22PgX&index=16
[3] Ibid.

social media, they directly address different actors such as celebrities, ecology influencers, international non-governmental organizations and decision-makers. They are organising "tweetstorms" to shower relevant actors with their demands against lithium extraction. Their main targets are lithium mining companies that already have their bases in Serbia such as Rio Tinto and Euro Lithium, but they also regularly address the president and prime minister of Serbia and politicians from the European Commission. Knowing that their protests across Serbia could get seen by the international community via social media, they produce bilingual banners that correspond to their bilingual hashtags.

#RioTintoGoHome
#EyesOnSerbia
#SerbiaIsNotForSale
We Don't Give #Jadar
#NoLithiumMining
#JadarValley
#StandWithSerbia
#YesToLifeNoToMining
#Lithium #Pollution
#MiningPandemic

Figure 2: bilingual hashtags

Figure 2 shows some of the most prominent hashtags in English that are being used in conjunction with the same slogans in Serbian in both online and offline realms. Some of them, such as #RioTintoGoHome and #SerbiaIsNotForSale appear on social media and in street protests. Hashtags such as #EyesOnSerbia function purely as online signifiers to address the broader international public and draw their attention to concrete issues. As a result, campaigning against lithium extraction in Serbia goes beyond borders as international activists get involved in campaigning online. This transnational collaboration can be seen as an algorithmic phenomenon simply because online communication using hashtags is guided and navigated by the algorithms.

4. Instead of Conclusion: Activism and Extractivism

Analysis of the narratives on lithium extraction in Serbia clearly shows that social media algorithms impact the way ecology activists operate in both the online and offline world. Entangled in the precarious labour of prosumption, they commodify themselves, their followers and their eco-activist work. Choosing the wording to articulate their ideas always depends on the preferences of algorithms that strictly adhere to the logic of the digital market. This is why they are using various algorithmic signifiers that are at the same time making their content visible and searchable online and shaping the narratives themselves. Hashtags that appear on Twitter are frequently featured on protest banners too. Conversely, slogans born in the streets are repurposed on social media.

Paradoxically, campaigns aimed against lithium mining that are indirectly addressing the problem of overconsumption of digital technologies rely on the very same digital technologies. The systemic problem of extractivism is therefore twofold as it refers to the extraction of personal data and exploitative algorithms and the extraction of natural minerals that are used for battery-powered technologies associated with these algorithms. Negative consequences of lithium mining are consequently falling into the fields of both digital and green criminology – novel concepts that are still not fully embedded into legal frameworks. The concept of green criminology recognises different living entities as possible victims of crimes, including plants and ecosystems. It expands beyond the traditional scope of criminology that focuses solely on human victims (Lunch & Long, 2021) and therefore breaks away from the anthropocentric view of nature which assumes that the environment is nothing but a resource available for humans to exploit. Nigel South writes that the concept of green criminology is helpful because it provides a different "perspective" and shifts the focus to vital concerns such as climate change, pollution, and public health (South, 2021: 114). Similarly, the field of digital criminology expands beyond traditional cybercrime and involves less apparent and still uncodified practices of algorithmic surveillance (Nosthoff & Maschewski, 2022). Extractivism can be seen as an economic strategy, regardless of whether the resources are material or immaterial and whether they are in the form of natural elements such as lithium and boron or personal data extrapolated from individuals. However, this strategy is problematic because of the invasive nature of extraction processes that incorporate various forms of violence. Couldry and Mejias speak about the non-physical violence associated with data extraction while establishing a new concept of "data colonialism" (Couldry & Mejias: 2020: 9). They are

emphasising that the practices of “data appropriation and processing” are simply the continuation of the traditional colonialism which focuses on immaterial as well as material resources which can be located anywhere and not just in the traditional sites of colonial extraction (ibid. 10). However, these contemporary colonization practices are not necessarily territorial because they clearly escape the north-south or east-west divide and appear everywhere. When Serbian ecology activists talk about neocolonialism, they fail to recognize this modern, decentralized style of colonialism, and they apparently do so in order to mobilize the Serbian public by catering to their patriotic sentiments. At the same time, these narratives are shaped by the algorithms that prioritize engageable content.

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ABOUT THE AUTHOR

Ivana Stepanovic (Serbia) is a Research Fellow at the Institute of Criminological and Sociological Research since 2014. She holds a PhD in Anthropology from the University of Belgrade, MA in Human Rights and Democracy in South-East Europe from the University of Sarajevo and University of Bologna and BA in Philosophy from the University of Belgrade. Her previous research has focused on the issue of privacy in the context of digital technologies. Currently, she is mainly interested in issues concerning privacy and security on the internet, the role of new media in political, cultural, and economic changes, particularly in South-East Europe, the role of algorithms in policing the internet and the impact of digital surveillance on everyday life. She is also interested in topics concerning privacy and security in prisons and the role of digital technologies in the transformation of labour. She is a permanent iASK Fellow since 2022.