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# Popular but exclusive: How can lower socio-economic status groups win access to urban green spaces?

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ABSTRACT

Territorial conflicts related to the use of urban green spaces typically result from conflicting preferences and institutions not being able to account for the equitable distribution of benefits. Our study focuses on the value conflicts and contestations around using an urban green space as a "social good" and the political processes of defining what makes it "good." It investigates the institutional setting and the preferences of 415 forest users in a series of entertainment events organized in a large municipal forest (Lagiewniki) in Lodz, Poland. The low socio-economic status group benefited at the cost of the high socio-economic group, whose members typically chose to change their routes in the forest to avoid the nuisance related to these events. The fact that the lower socio-economic status group benefited seems to have been an unplanned side effect of leasing the deteriorating site (to reduce municipal costs) to a company that chose to pick a low-hanging fruit and not invest in developing the site but only cater to the less picky clientele. The local authorities responsible for leasing the site turned a blind eye to the various nuisances caused by these events and disregarded local conservation provisions. We put this case in the context of the "lumpengeography of capital" (Walker, 1978), which suggests that due to the relative scarcity of capital and the abundance of green spaces, some areas remain in a stage of disinvestment, perhaps only temporarily awaiting the next wave of capitalist redevelopment.

## 1. Introduction

The benefits associated with urban green spaces are not provided by ecosystems alone but are co-produced by nature and people (Andersson et al., 2015; Spangenberg et al., 2014). The green space benefits are not readily available nor universally accepted but are filtered through the lenses of the respective institutions and human perceptions and preferences (Andersson et al., 2021). Socio-economic background is one of the factors that influence how people perceive and use green spaces and what activities they perform in green spaces (Fischer et al., 2018), which often leads to territorial conflicts related to group-specific preferences for how to use these green spaces. This becomes a question of how power is asserted and by whom, which has important implications for environmental justice. Most often, decisions are made by the better-off to meet the preferences of their peers (Ernstson, 2013; Heynen et al., 2006). In consequence, it is often argued that urban green spaces typically benefit the better-off or privilege the already privileged (Garcia-Lamarca et al., 2021; Immergluck and Balan, 2018), which is coupled by debates on how to make urban green spaces more equitable (Haase et al., 2017; Kronenberg et al., 2021a; Swyngedouw and Heynen, 2003).

When formal institutions fail to account for the preferences of marginalized groups, these groups may actively demand their rights or passively oppose being deprived of them. There are multiple examples of marginalized groups fighting for territories and spaces that often include green spaces and other public spaces (Lipsitz, 2007; Ramírez, 2020). For example, the drumming demonstrations and the massive cookout on the shores of Lake Merritt in Oakland (California) were organized to claim this space back for the Black community and oppose gentrification and the "white supremacist notions of urban space", with its associated anti-Black and anti-migrant practices (Ramírez, 2020, p. 160). Lake Merritt, the site of these events, is a popular public space and a park adjacent to downtown Oakland, where people typically gather to barbecue, dance, play music, and enjoy nature.

A very different instance when the less well-off managed to secure

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their share of urban green space benefits, even at the cost of the better-off, involves "square dancing" in Chinese cities. It is a popular form of physical activity in public spaces (parks and squares), attended by large groups of participants who perform physical exercise to loud music for entertainment, as well as other mental and physical benefits. It is "spontaneously organized by the masses" and is practised in parks and squares by up to 100 million people "due to its low cost and great enjoyment" (Xiao et al., 2020, p. 1). Still, it involves conflicts between "square dancers who pursue simple happiness and nearby residents who want a quiet, private space." Xiao et al. (2020) found that square dancing significantly decreases nearby housing prices, i.e., it more than offsets the premium typically offered by green spaces.

Other examples show that the use of urban green spaces in a way that satisfies the preferences of groups with lower socio-economic status may represent attempts of the elites to exercise and strengthen their power. For example, one prominent local politician in Bucharest, Romania, organized political rallies in public parks. They involved entertainment and distributing food and drinks. Set in front of the Parliament Palace, they were portrayed as a kind of "administrative refeudalisation of leisure and nature", "with economic patriarchal interests arbitrating socio-natural reality" (Gavriș and Popescu, 2021, p. 140–142). During such events, "thousands of portions of food and free drinks excited the (poor) population and transformed the parks (Izvor, Sebastian) into a mayoral fief. The limitless imagination (and power) of the politician reached monstrous levels when a pig was slaughtered and cooked under the eyes of curious onlookers in the name of 'tradition'" (Gavriș and Popescu, 2021, p. 141). The events were noisy and involved popular entertainment, causing a nuisance to nearby inhabitants and those interested in using the parks for other purposes.

Clearly, what a park or forest is for is a social construct. While some social groups may be more interested in "undisturbed contact with nature", others may only visit parks when offered additional entertainment. Although public green spaces should ideally help to increase social cohesion (Jennings and Bamkole, 2019; Wan et al., 2021), it seems illusory to assume that the sheer presence of urban green spaces will boost positive social interactions and stimulate social cohesion. Quite the opposite. Green spaces may be arenas of conflicts between different needs and preferences, and different institutional settings sanction some of those needs and preferences at the cost of others. This is in line with broader issues of recognition and interactional environmental justice and the fact that one socio-economic status group may affect or even push the other out of green spaces through its behaviour or other forms of pressure, such as direct lobbying, policing, recognizing the different preferences and values, and changing prices (Langemeyer and Connolly, 2020; Low and Iveson, 2016). While various events held in commercialized public spaces are typically related to the interests of the higher socio-economic status groups – those who can afford to attend and benefit from the attractions offered (Smith, 2016, 2019; Waitt, 2008) – different events may target different audiences.

As shown by the example from Bucharest, in an attempt to further increase their power or to derive direct or indirect economic benefits that perpetuate their position, the elites may grant environmental privilege to groups with lower socio-economic status and make green spaces cater to their needs and preferences (Argüelles, 2021). This is particularly evident in a neoliberal economic setting where green spaces can be leased for various purposes, and this lease is justified by the need to raise funds for green space maintenance (Smith, 2018), even at the cost of other green space users (Kronenberg et al., 2020). However, this transfer of environmental privilege might be an unintentional side effect of neoliberal environmental governance, which in itself may not be directed at harming or supporting any socio-economic status group. This is connected to neoliberal green space governance, which favours the economic opportunities related to the commercial use of green spaces – and commercial needs typically satisfy the interests of the most numerous group of users or those willing to pay for the organized activities.

Our study focuses on the value conflicts and contestations around the use of an urban green space as a "social good" and the political processes of defining what makes it "good." It investigates the institutional setting and the preferences of forest users regarding a series of entertainment events organized in a large municipal forest (Lagiewniki) in Lodz, Poland, on summer weekends since 2015. To ascertain who benefitted and why, we surveyed forest users (N = 415) and analysed the institutional setting within which the events were organized.

In the following section, we present our case study area and the events held there, along with the methods we used. Section 3 contains the results of the institutional analysis and the survey, each presented separately. In section 4, we discuss these results in the context of the mechanisms that underlie the capture of benefits by the low socio-economic status group, along with the broader environmental justice and political ecology considerations. Section 5 concludes.

## 2. Methods

### 2.1. Case study area

We use a case study of entertainment events organized in Arturowek, a leisure facility located in the southern part of the 1300-ha-large Lagiewniki Forest in Lodz (Łódź), Poland. Lagiewniki Forest is an easily accessible place, primarily for recreation and relaxation, just a few kilometres from the city centre (Jaskulski and Szmidt, 2015). It is characterized by a semi-natural character, with a large diversity of flora and fauna (Sterno, 2015). In the city's official promotional materials, Lagiewniki Forest is often portrayed as a natural haven, offering a real sense of nature only 5 km north of the city centre. In spite of, or perhaps because of, its peripheral location in the city, the area around Lagiewniki Forest has attracted high-end developers and private housing, and the forest has a particularly significant impact on nearby real estate prices (Czembrowski and Kronenberg, 2016).

Arturowek consists of municipally owned bungalows (a resort), a public beach (with seasonal lifeguards), ponds, water equipment rental (such as pedalos and kayaks), playgrounds, tennis courts, and an outdoor gym. The bungalows were previously managed by the City Office (through the Municipal Centre for Sports and Recreation) as a low-cost hotel (camping standard). However, because of the limited demand and the costs involved, the city decided to lease this deteriorating resort to a private entity (see Sections 2.2 and 2.3). The site is located 300 m from the southern border of a 70-ha nature reserve which protects the most ecologically valuable part of the forest. In recent years, the area has become increasingly commercialized, with new seasonal cafes, a Go Ape-like adventure park, paid playground and additional paid attractions. The site can be easily reached from the city centre with public transport, and it has two large car parks in the vicinity.

### 2.2. Entertainment events

To reduce costs and to attract more visitors, since 2013, the City Office has leased the resort with bungalows to a private company, which manages the site for its own commercial interest. Since 2015, the company has organized, among other things, a series of regular loud pop music ("disco polo") festivals, as well as beer and family barbecue festivals (hereafter collectively referred to as festivals or entertainment events). In 2017, the year with the highest intensity of events, the festivals were organized interchangeably on average every second weekend from May to September. According to the organizer's website, the largest events attracted about 10,000 participants daily.

The family barbecue festivals involved various stands offering food, and food trucks, typically serving fast food and sweet treats such as ice-cream, candy-floss and waffles, as well as multiple other attractions, such as a mechanical bull (a bucking bronco machine), car driving simulators, mini golf, darts, quads, and segways. Beer festivals featured stands with beer from local and regional breweries in Poland, as well as

large brands, again complemented with food stalls. Although the company opened its Arturowek Forest Stage (Leśna Scena Arturówka) to artists from any music genre, disco polo was the only one staged regularly. The disco polo festivals, which have been organized since 2016, were the loudest and the longest of the different entertainment events in the forest. In 2017 (the most intensive year), they were held over nine weekends. Disco polo is popular kitsch music that represents a "business-inspired aesthetic compromise" (Pasternak-Mazur, 2017, p. 73). Although it was rejected by the major labels and denied access to mainstream media on the grounds of its poor quality, it dominated Polish fairgrounds and popular parties, especially outside of large cities, and generated exceptionally large sales (Pasternak-Mazur, 2017). "No other aspect of mass culture received more severe criticism, especially from the intelligentsia," and yet disco polo is largely enjoyed by "ordinary Poles" (Pasternak-Mazur, 2017, p. 73).

### 2.3. Institutional analysis

To investigate the local authorities' approach towards organizing festivals in the forest, we performed an institutional analysis. This involved three in-depth interviews with the heads of the City Forestry Office, the Municipal Centre for Sports and Recreation, and the Department of Treasury of the City Office of Lodz, i.e., three public institutions involved in the management of Arturowek. The City Forestry Office manages forests in Lodz, and its office is in Lagiewniki Forest. The Municipal Centre for Sports and Recreation manages the most important recreational sites in Lodz, including ponds and water recreation in Arturowek. It used to manage the whole of Arturowek on behalf of the City Office. The Department of Treasury deals with properties owned by the city, including the real estate properties in Arturowek, such as the resort with bungalows where the festivals have been organized.

We also analysed specific provisions of the lease agreement signed by the City Office (Department of Treasury) and the lessee, as well as the respective local zoning plan and the conservation plan for the Lodz Heights Landscape Park (Wojewoda Łódzki, 2003), of which Lagiewniki Forest is part. The lease agreement covers an area of 1.94 ha – the resort with 23 bungalows and six additional buildings, including a restaurant. The agreement indicates that the property can be used for recreational services, including tourism, accommodation, parking, and catering. Requirements for the potential lessees were announced in a public tender procedure (to maintain the resort in good shape and to attract people to Arturowek). The starting price in the procedure was 9000 PLN (ca. 2000 EUR), and three actors were interested. Finally, the local zoning plan specifies what land uses and – more broadly – what activities are allowed in different parts of the forest.

Additional questions were sent to the Roads and Transportation Authority of the City Office and the Department of Managing Road Traffic in the City Engineer's Office (within the City Office of Lodz) concerning road signs which regulated the inflow of cars into the area where the entertainment events were organized. About ten years after the conservation plan was introduced, the local road signs were changed to allow direct access to the festivals by car.

### 2.4. Survey

To investigate opinions on the festivals and their influence on the respondents' use of the forest, we surveyed 415 people from May to September 2017. The primary research question was whether people of high socio-economic status purposefully avoided the area where the events were organized and – conversely – whether people of lower socio-economic status attended the events. The interviews were carried out during the festivals throughout the whole season. The interviews were carried out in three sites: in Arturowek (next to where the events took place) (marked A in Fig. 1), 1.5 km north of it (in the middle of the forest, separated from Arturowek by the nature reserve) (B), and 2.3 km north of it (close to another major access point to the forest) (C). On

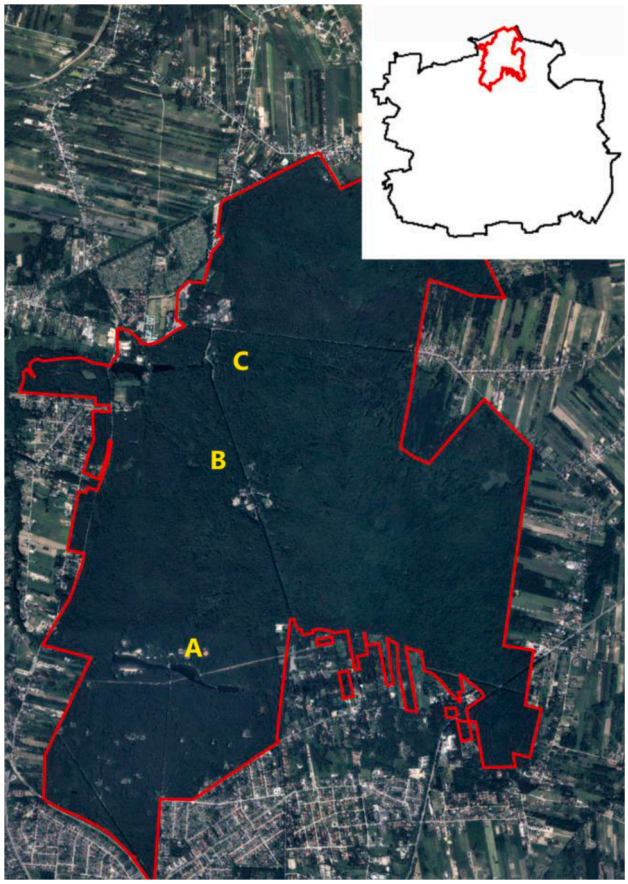


**Fig. 1.** Orthophotomap of Lagiewniki Forest with the location of the interview sites (A – Arturowek, where the festivals were organized; B – middle of the forest; C – the other side of the forest).

average, the interviews took around 10 min each. As soon as one interview was over, we approached the next passer-by. We conducted survey sessions simultaneously at the three sites, each lasting approximately two hours. Because of the much higher concentration of people, site A had two interviewers, while B and C had only one each (with fewer people present, everyone passing by B or C was asked to participate in the survey).

The respondents were asked in a short survey (13 questions) whether they had participated in the festivals and what their opinions about them were. In particular, we asked whether people had changed their routes in the forest to avoid festival-related nuisance. To analyse the respondents' socio-economic status, we asked about their profession and educational level. We also asked about how the respondents typically used the forest. Descriptive statistics for the survey sample can be found in Table 1.

### 2.5. Data processing

Based on the declared profession and educational level, we assigned each respondent to one of three socio-economic status groups: high, middle, or low. We asked retirees about their last profession before retirement. Following the Polish Classification of Occupations and Specializations for Labour Market Needs (Klasyfikacja zawodów i specjalności, 2012), we assigned each of the declared professions into one of nine major categories. In the case of "professionals", the most diverse category, we used the higher/other educational level as an additional criterion. In this way, socio-economic status is connected with the profession and the skills it requires, but we also ensured it was consistent with income diversity.

**Table 1**
Descriptive statistics for the survey sample.

| Variable | % in sample |
|---|---|
| ***Socio-economic status groups:*** | |
| Low socio-economic status | 21.50 |
| Middle socio-economic status | 43.10 |
| High socio-economic status | 35.40 |
| ***Frequency of visiting forest:*** | |
| Once a year | 10.80 |
| A few times per year | 32.30 |
| A few times per month | 25.40 |
| A few times per week | 26.10 |
| Every day | 5.50 |
| ***Gender:*** | |
| Male | 56.20 |
| Female | 43.80 |
| ***Motivation for being in the forest:*** | |
| Entertainment | 3.30 |
| Active recreation | 83.50 |
| Passive recreation | 7.70 |
| Meeting friends | 2.90 |
| Other | 2.60 |
| ***Respondent's location:*** | |
| Arturowek (A) | 53.60 |
| Middle of the forest (B) | 32.30 |
| The other side of the forest (C) | 14.10 |

The high socio-economic status group contains respondents who work (or used to work, in the case of retirees) as public authorities, senior public officials, and managers, along with professionals with higher education. The low socio-economic status group contains those respondents whose professions included service employees and salespeople, crafts and related trade workers, plant and machine operators, including assemblers, or other elementary occupations. The middle socio-economic status group contains respondents of other professions (including students and the self-employed) (Table 1).

To ensure consistency of our delimitation of socio-economic status groups, we compared their average monthly wages. For this purpose, we assigned to each profession the mean monthly wages reported for the respective profession by Statistics Poland (2018). For the retirees, we used the average monthly pension in Poland, but accounted for the deviance from the mean salaries respective to the previous profession. For students, we assumed a 500 PLN/month scholarship. Following the above, we obtained the following approximate mean wages for respondents belonging to the high, middle, and low socio-economic status groups, respectively: 5850 PLN, 4135 PLN, and 2800 PLN.

To investigate how socio-economic status differentiates the preferences towards the festivals, we started by calculating the share of respondents within each of the three socio-economic status groups who knew about the events, attended them, expressed positive opinions about them, or felt forced to change their routes to avoid the festivals. The shares were calculated for the full sample and then for the subsamples of respondents, following the decision tree presented in Fig. 2. Each share that we calculated for a given socio-economic status group was compared with the respective share calculated for respondents who belong to the two other socio-economic status groups together. We then conducted the Wald test for the equality of two proportions to ascertain whether the shares differed statistically significantly. Apart from socio-economic status groups, we conducted a similar analysis for other features of the respondents.

Finally, to validate the preliminary results, we estimated the logistic regression models. The advantage of using logistic regression is that it is possible to control not only for the respondents' socio-economic status but also for additional features, such as gender or the frequency of visiting the forest (Hilbe, 2009). We estimated four logistic regression models with binary dependent variables, the respondents' socio-economic status as explanatory variables, and a set of control variables that reflect the respondent's features. The logistic regression models were estimated in the generalized linear model (GLM) framework in R Cran 4.1.0.

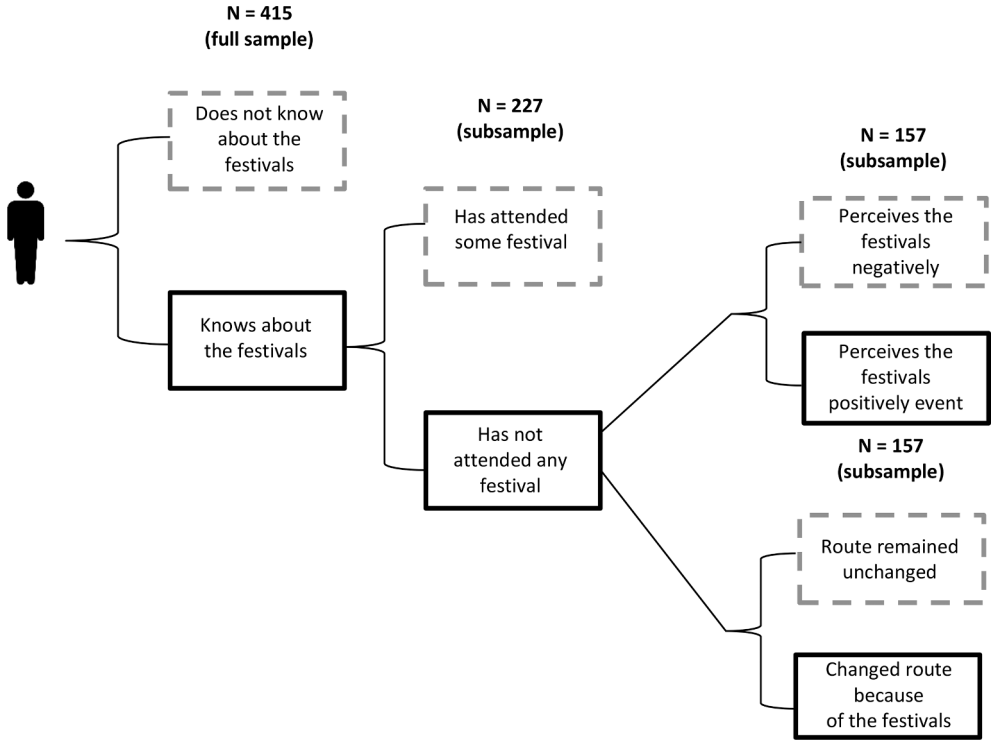


**Fig. 2.** Respondents' decision tree used in the analysis.

## 3. Results

### 3.1. Institutional analysis

Document analysis indicates inconsistencies between what is intended and formally allowed in Arturowek and what is tolerated or what the authorities turn a blind eye to. As far back as 2003, the conservation plan for the Lodz Heights Landscape Park highlighted tourists' excessive penetration of Lagiewniki Forest and, in the specific case of Arturowek, the plan prescribed "moderate recreational use based on the natural properties of the forest ponds", "a reduction in the intensity of motor vehicle traffic", and "the conservation of unique landscape and ecological values" (Wojewoda Łódzki, 2003, p. 54). The document warned against increasing recreational use of the area, in the interest of preserving the site itself, as well as the nearby nature reserve. In particular, it warned against developing commercial activity in the area (e.g., gastronomic services and advertising).

The local zoning plan for Lagiewniki Forest adopted in 2016 introduced formal restrictions on creating new permanent commercial structures, although it did allow for temporary constructions, including exhibition pavilions and beer gardens. The plan sanctioned hotel and gastronomic services in this area. Still, the local plan includes Arturowek as a site of acoustic preservation, meaning that the activities that generate noise in this area should not exceed 55 dB during the day and 45 dB at night. These provisions are clearly violated by the music festivals, which can be heard over a kilometre away in the forest.

The lease agreement entered into force in November 2013, and will last 15 years. According to information obtained from the City Treasury Department, the City leased the resort "to attract the largest possible number of people to this area". Interestingly, however, it never considered the carrying capacity of the forest or Arturowek. It also wanted to reduce the costs of maintaining the site. The only provision that referred to potential nuisance is that the lessee is obliged to follow the rule of law and the basic principles of social coexistence. With regard to costs, the previous management by the Municipal Sports and Recreation Centre had not generated sufficient revenue, and in the meantime, the condition of the resort was deteriorating. Thanks to the agreement, all the costs related to resort maintenance are borne by the lessee, and the City receives a monthly fee of 12,100 PLN (ca. 2600 EUR), plus 23% tax (this fee is valorized with the annual inflation rate). The City Treasury Department controls the state of the resort and whether the conditions of the agreement are met, while the two other actors refuse any responsibility for the festivals, even though their employees regularly visit the site because of their obligations related to their specific parts of Arturowek.

The three public actors involved in managing different sections of Arturowek have a very clear division of responsibilities and tend to have a very clear focus, disregarding the potential overlap of their responsibilities. Officially, the City Forestry Office and the Municipal Sports and Recreation Centre do not know anything about the festivals, and they do not even need to be consulted about them. None of them recorded any complaints about the entertainment events from forest users. The City Forestry Office, which in principle manages the whole of Lagiewniki Forest, does not intervene in anything that takes place on land with buildings owned by the City Office. Similarly, the Municipal Sports and Recreation Centre, which used to manage all recreational facilities in Arturowek, is responsible for the boating, bathing and playing areas, the two playgrounds and the outdoor gym, and not for anything else anymore. The Municipal Sports and Recreation Centre continues to organize sports events in the forest, such as running, cycling or skiing competitions (which start and end in Arturowek, ensuring an additional flow of customers to the leased facilities). In addition, the Municipal Sports and Recreation Centre has the right to temporarily lease the areas it manages to third parties for similar purposes, i.e., for sports and recreational events.

In response to our questions about the motivation for the change of the road signs, the local Road and Transport Authority explained that the previous sign ("closed to all traffic in both directions") was actually inefficient because it was complemented with an exclusion for those travelling to companies that operated behind the sign. The sign was replaced with a living street ("residential zone"), which legalized any entrances to the zone but requires caution for pedestrians. The result is that the narrow streets behind the zone are often congested with parked cars.

### 3.2. Survey

#### 3.2.1. Statistical analysis

Over half (55%) of respondents declared that they knew about the festivals; however, this share varied among socio-economic status groups (Table 2). Those who belong to high and low socio-economic status groups statistically significantly more frequently declared that they knew about the festivals (61% and 58%, respectively) than those with middle socio-economic status (48%).

Among those who knew about the festivals, only one-third participated. Again, the share of participants varied statistically significantly between socio-economic status groups. The lowest participation rate characterized the high socio-economic status respondents (17%), while the low socio-economic status group had the highest share (54%).

We found that only 18% of those who knew about the festivals but did not attend them assessed these events positively. In the same subsample, one-third of respondents declared that they felt forced to change their route in the forest to avoid the festival and the related nuisance. The share of high and low socio-economic status groups differed in the case of both statements. Only 9.50% of high socio-economic status respondents who knew about the festivals but did not attend assessed them positively, while 42% changed their routes in the forest to avoid the festivals. In contrast, among those with low socio-economic status, 37.50% assessed the festivals positively, and only 4% changed their routes.

#### 3.2.2. Logistic regression models

The logistic regression models confirmed the results of the basic statistical analysis (Table 3, with additional details in the Supplemental material). In the model with knowledge about the festivals as the dependent variable, there are no differences between socio-economic status groups regarding knowledge of the festivals. This means that if the frequency of forest visits and the motivation for visiting the forest are constant, the odds of knowing about the event are statistically the same for all groups.

**Table 2**
Perceptions of the festivals by socio-economic status groups.

| Socio-economic status group | Knew about the festivals | Attended some festival | Positively assessed the festivals | Changed the route because of the festivals |
|---|---|---|---|---|
| Low socio-economic status | 57.78% (*) | 53.80% (***) | 37.50% (***) | 4.20% (***) |
| Middle socio-economic status | 48.04% (**) | 33.70% | 21.00% | 38.60% |
| High socio-economic status | 60.96% (*) | 16.90% (***) | 9.50% (***) | 41.89% (***) |
| All socio-economic status groups | 54.70% | 31.70% | 18.10% | 33.33% |
| N | 415 | 227 | 157 | 157 |

Significance level (*)0.1, (**)0.05, (***)0.01 from the Wald test for the equality of two proportions.

**Table 3**
Estimated odds ratios from the logistic regression models.

| Variable | Knew about the festivals | Attended a festival | Positively assessed the festivals | Changed the route because of the festivals |
|---|---|---|---|---|
| Intercept | 0.71 | 0.31*** | 3.05 | 0.49*** |
| ***Socio-economic status group (middle socio-economic status group as the reference category):*** | | | | |
| Low socio-economic status | | 2.29** | – | 0.07*** |
| High socio-economic status | | 0.36*** | 0.31** | – |
| ***Frequency of visiting forest†*** | 1.84*** | – | 0.46*** | – |
| ***Gender (female as the reference category):*** | | | | |
| Male | – | 2.39*** | – | – |
| ***The motivation for being in the forest (all other reasons as a reference category):*** | | | | |
| Active recreation | 0.26*** | – | – | – |
| Meetings friends | 0.19** | – | – | – |
| ***Respondent's location (all other locations as a reference category):*** | | | | |
| Middle of the forest | – | – | – | 2.15** |
| N | 415 | 227 | 157 | 157 |
| AIC | 525.44 | 262.7 | 132.83 | 185.93 |

Significance level (*) 0.1, (**) 0.05, (***) 0.01. † The continuous control variable.

In the model with the perception of the festivals as the dependent variable, the odds ratio for high and low socio-economic status groups is statistically significant. The odds of attending the festivals for the high socio-economic status group are 64% lower than for the middle socio-economic status groups. At the same time, the odds of the low socio-economic status group attending the festivals are 129% higher than for the middle status group. In this model, we also found that the odds of attending the festivals are 139% higher for males than for females.

The respondents' socio-economic status was also statistically significant in the two models estimated for the subsample of those who knew about the event but did not attend the festivals. In particular, the odds of positively assessing the festivals are 69% lower for the high socio-economic status group than the other two groups. At the same time, the odds of being forced to change the route due to the festival are 93% lower for the respondents from the low socio-economic status group than the other two groups.

## 4. Discussion

There are examples of lower socio-economic status groups winning territorial conflicts related to the use of urban green space. The Chinese practice of square dancing mentioned in the introduction offers one example. Other examples involve active resistance against the dominant forms of cultural and economic supremacy of the privileged socio-economic groups, with green spaces as arenas where this resistance occurs (Bach and McClintock, 2021; Lipsitz, 2007; Ramírez, 2020). Where does our case study fit in this context, and what does it actually add?

### *4.1. Did a low socio-economic status group win a conflict related to an urban green space?*

Does our case study offer an example of a low socio-economic status group actually winning a territorial conflict related to the use of urban green space? To be classified as such, the lower socio-economic status group would have to actively demand access to this green space (which it has never been denied) and self-organize to benefit from it. In our case, the low socio-economic status group seems to have been a passive beneficiary of the events organized by the private actor leasing the resort. The events did involve a conflict between groups with different socio-economic statuses and, indeed, the group with the lower socio-economic status won this conflict, or perhaps, only accidentally happened to win it. The fact that these events were targeted at the low socio-economic status group may be related to the fact that it was an easy and low-cost option, a low-hanging fruit for the lessee. Popular entertainment draws many attendees who do not have high demands regarding the design or standard of finish, or the recreational site and its infrastructure; hence it did not require additional investment.

Many green space upgrades (which included preserving their ecological qualities) or expensive ticketed events held in green spaces (which typically affect ecological qualities) have been found to meet the needs of high socio-economic status groups and have led to eco- or green gentrification (Mullenbach and Baker, 2020; Pearsall and Eller, 2020; Rigolon et al., 2018). Therefore, we suggest that – analogously – what we have observed might be classified as "eco-pauperization" or "eco-popularization." There are at least five arguments that make such terms relevant.

First, analogously to gentrification that ultimately benefits the better-off at the expense of the less privileged, we saw that the low socio-economic status group benefited at the expense of the high socio-economic status group. Similar to certain green space upgrades and various urban revival initiatives, events held in green spaces are likely to result in changes in the green spaces' perceived attractiveness and, eventually, in the socio-economic profile of their users or nearby inhabitants. These issues are most typically associated with eco-gentrification because the events may be ticketed, involve consumption that not everyone can afford, be connected with other access restrictions, or discourage certain groups of users. Some events and green space designs may be of an "elite" character (Loughran, 2014; Smith, 2018) and target those of high socio-economic status. However, others may be intended for a wide audience and cater to basic cultural preferences, such as loud music and alcohol, which – in contrast – those of high socio-economic status would not necessarily join. Both situations may be motivated by the same "objectively neutral" aim of animating green spaces, enlivening their social life, and bringing in more users (Smith, 2018), but their results may be diametrically different.

Second, while gentrification typically occurs as a result of some initial investment (although it may also result from mere changes in preferences (Łaszkiewicz, 2023)), we did not observe any new investments in Arturowek, at least not in the recreational complex where the events were held. Quite the opposite. The City Office leased the site to reduce the municipal costs related to its maintenance, and the lessee followed the lowest-cost option. The site did not benefit from any improvements, and it might have actually deteriorated over time. Indeed, regardless of whether it is eco-gentrification or eco-pauperization/eco-popularization, at the roots are neoliberal approaches to urban green space governance. These neoliberal policies aim to seize different opportunities related to the use of green spaces by different target groups. The type of upgrades or management patterns depends on the characteristics of the site and the financial means to be used. A site that has started to attract better-off users in a central location in a city is likely to be subject to further gentrification, with new cafes and new attractions (such as paid light shows and exhibitions). Meanwhile, the run-down and peripheral sites are more likely to be 'sacrificed' by the elites, and they can be managed in a way that caters to the less picky target groups,

offering simpler facilities without paying so much attention to the design and general condition of the site. The gentrifying centrally located sites may be marketed as modern, innovative, a first-ever, and cosmopolitan. Meanwhile, the peripheral sites undergoing eco-pauperization/eco-popularization may be marketed as homely, tame, and convivial.

Third, gentrification typically occurs in more central and important locations, while eco-pauperization/eco-popularization is more likely to occur in peripheral locations (Perkins, 2013). Due to the relative scarcity of capital and the abundance of green spaces, some areas remain in a stage of disinvestment, perhaps only temporarily awaiting the next wave of capitalist redevelopment. It is a phenomenon that Walker (1978) called the "lumpengeography of capital" and that McClintock (2014, 2018) connected with urban green spaces. Perhaps, it could also be related to the scarcity of the respective ideas for upgrading them and the limited demand for such upgraded green spaces and their specific attractions. Indeed, other green spaces in Lodz are used for more "bourgeois" purposes, with most attention paid in recent years to upgrading parks in the city centre, and a fanciful example of the planned International Horticultural Exhibition in one of the city's heritage parks that has already raised much opposition due to its elitist character and concerns regarding restricted accessibility of the park for the general society (Wolff et al., 2022). Interestingly, at the opposite end of Lagiewniki Forest (close to point C in Fig. 1), a new luxurious 5-star hotel is being built around the previously run-down historical palace of one of the grand industrialists of 19th-century Lodz. Indeed, green spaces undergoing both eco-gentrification and eco-pauperization/eco-popularization are used for leisure and consumption rather than contact with nature.

Fourth, loud events in the forest result in environmental impoverishment, along with negative impacts on other species. Most importantly, this refers to noise but also litter and some forms of anti-social behaviour related to the use of alcohol and, potentially, other substances (Garcia, 2018; Taylor et al., 2015). It is connected to what Smith (2016) called green space "denigration", which refers to problems such as environmental damage, damage to infrastructure, littering and the noise that results from events organized in green spaces. It is also connected to the "deviant leisure" perspective, which addresses various forms of harm, exploitation and vulnerability associated with various leisure practices associated with consumer capitalism (Raymen and Smith, 2019). In general, environmental impoverishment links to the problem of pursuing leisure activities that degrade the environment and/or cause social harm. Loud events, which are aimed at mass audiences, translate into pauperization – or at least impoverishment or erosion – of the potential relationships with nature that could be experienced in a given green space. One cannot really experience nature in a place where the whole attention is necessarily placed on sports or music events. The sheer fact that they attract many users requires changes in the infrastructure and rules for using a site. It also means that they take most of the attention one is able to focus at a given place. In this sense, environmental impoversishment could also be understood in terms of reduced richness of options (the potential benefits that urban green spaces could provide to people).

Fifth, the impacts on green space accessibility may be different. Gentrification may involve ticketing and certain cultural codes (e.g., desired behaviour patterns), while pauperization or popularization may be connected to the character of the event itself and the attendees' social structure. Eco-pauperization or eco-popularization comes about through reduced attractiveness for the high socio-economic status group rather than restricted accessibility (in the sense that it corresponds with the question "Do I want to spend time there?" rather than "Am I welcome there?" or "Can I afford it?" (Biernacka and Kronenberg, 2018, p. 23)). Moreover, our case of entertainment events in the forest highlights that the impacts of such events may reach much farther than the site of the event itself and affect the surrounding public and private space. The events we studied affected the attractiveness of the forest far outside of the fenced area where the events took place. Presumably, the larger the event, the more significant its impact on green space accessibility and attractiveness. Thus, both eco-pauperization/eco-popularization and eco-gentrification need to be discussed in the context of conflicts between different green space beneficiaries – or trade-offs between satisfying the needs of different target groups. In this context, eco-popularization might even be preferred, given its linkages to populism and the masses, without suggesting a normative loss or impoverishment that some readers might associate with pauperization.

Eco-pauperization or eco-popularization might be a good analogue of eco-gentrification, although we do realize that neither of these terms is free of controversies. However, just as eco-gentrification does not imply that those who benefit are better than those who are pushed out (nor that they are the actual "gentry"), there is nothing normative about eco-pauperization (and nor are the beneficiaries "paupers"). Simply, either the better-off or the worse-off benefit at the expense of the other group. We may criticize both situations on the grounds of environmental justice and because it may be associated with changes in whose preferences and interests are accounted for or normalized by the respective institutional settings. Nevertheless, there is no coherent and shared conception of ethics and morality in a consumer capitalist society predicated upon the pluralistic values of sovereign liberal individualism (Raymen and Smith, 2019).

### *4.2. Benefits derived by the low socio-economic status group in the context of environmental justice*

While the low socio-economic status group has never been denied access to Lagiewniki Forest, and most attractions in Arturowek have always been free of charge, many members of the low socio-economic status group might not have been interested in actually spending time there. Indeed, those of low socio-economic status tend to use urban green spaces less often than those of high socio-economic status, with "lack of interest" provided as one of the most common explanations (Boyd et al., 2018; Łaszkiewicz et al., 2023). In our case, members of the low socio-economic status group were drawn to the forest by the popular events organized in Arturowek. Even if it might not have been a planned strategy, it did result in increased use of the forest by the low socio-economic status group. However, the events also affected the forest's attractiveness to other users. Quite unusually, the events favoured by the low socio-economic status group were much more likely to result in members of the high socio-economic status group changing routes.

This contrasts with most environmental justice studies, which highlight the closely related phenomena of eco-gentrification and urban green boosterism. The latter refers to promoting urban economic growth through the use of green amenities, which typically supports the interests of the better off and results in those amenities being less affordable (Garcia-Lamarca et al., 2021). While such green growth/sustainable/resilient planning agendas are adopted by an increasing number of cities worldwide (Connolly, 2019), the alternative trends are relatively rare and hence potentially important from the point of view of environmental justice.

On the one hand, bringing more people to green spaces, including those who would not visit them otherwise (e.g., because of a lack of interest or because there is no such habit in their socio-economic group of reference), is a sign of democratization. Indeed, in historical times, urban green spaces were typically reserved for the local elites, and even nowadays, the environmental justice literature reveals how privileged socio-economic groups are also favoured in terms of high-quality green space availability and accessibility (Haase et al., 2017; Rigolon et al., 2018; Tozer et al., 2020). Staging popular entertainment in green spaces has partly contributed to them losing their status as places "for elitist conspicuous consumption" (Smith, 2016, p. 8).

On the other hand, the character of popular entertainment events is often expansive, and they affect many other green space users, even beyond the specific location where they are held. Additionally, depending on the character of the event, the social structure of green space users is likely to change. While our case study forest remained

available and accessible, it became less attractive for some of its regular users. The authorities allowed the nature experience in this area to degrade, and although it has consequences for all forest users, those with high socio-economic status were affected more.

Interestingly, these considerations are not new. For example, in her account of planning urban green spaces in the Ruhr region in Germany in the 1960s, Angelo (2021) highlighted two conflicting discourses – planning green spaces as bourgeois sites and preserving their proletarian character. These discourses focused on different green spaces: new modern parks and informal green spaces inside the workers' colonies (residential districts), respectively. The bourgeois sites cultivated their users (and in particular, working-class industrial workers) "into democratically oriented bourgeois citizens" – "worldly not provincial, savvy not superstitious, and discerning and self-possessed, part of or at least at home in comfortably middle-class West Germany" (Angelo, 2021, pp. 94–96). Meanwhile, the proletarian green spaces included those collectively used for recreation and other social purposes by the workers inside their residential areas. On the one hand, there were manicured, sterile, and cosmopolitan green spaces for all. On the other hand, there were counter-public spaces, which allowed users to identify themselves and to manifest their presence, co-producing the spaces as they wished through their flower gardens, kitchen gardens, chickens, pigeons, and goats.

The "proletarian" character of spontaneity, conviviality, and sense of community resonates well with the festivals organized in Lagiewniki Forest, with beer, barbecues, and popular music. And yet it shows that popular events directed at the low socio-economic status group can still be seen as an economic opportunity simply by accounting for the needs of less picky target groups. Clearly, there has been much opposition to various ticketed events and mega-events, in particular, when they were planned in urban green spaces (Lowes, 2004; Madden, 2010; Smith, 2019, 2016). Such opposition primarily related to issues of access, disruption, noise and damage, but also commercialization.

While opposition to ecogentrification has been well documented in the literature (Anguelovski, 2016), we have not seen any signs of active opposition to organizing the festivals in the forest, apart from passive complaining. Perhaps the scale of the problem was not large enough for people to demand changes, or the duration of the events was sufficiently limited. Still, there are examples in the literature that show how green spaces were "upgraded" to avoid populist uses or being used by "undesired" social groups, such as the Latino community in New York's Central Park (Rosenzweig and Blackmar, 1992). In our case, out of the 82 respondents who provided additional comments on the festivals, most were of the opinion that such festivals (especially the disco polo ones) should not be organized in the forest and – if at all – that they should not be very loud. Additional comments referred to specific nuisances, most notably noise, congestion, litter, and drunken people. Interestingly, one respondent (a manager) specifically commented that the festivals were of no interest to him, but "for people from high-rise buildings [used here as a synonym of the worst-off], this is entertainment, and they also seek fresh air."

However, does the granting of environmental privileges to the low socio-economic status group reflect a recognition of those people's needs, or does it imply the creation of a system of procedures to allow everybody to satisfy their needs in the forest? While this is certainly an issue of recognition and procedural justice (Low, 2013; Schlosberg, 2007), it also links to the political ecology of who makes decisions, within which institutional settings, and whose preferences those decisions are meant to satisfy.

### *4.3. If not won, then how were the benefits granted to the low socio-economic status group? The political ecology context*

One of the basic tenets of the political ecology literature has been that "poor urban residents who lack the financial resources […] are often unable to produce local and healthy urban ecologies for themselves" (Heynen et al., 2006, p. 5). In this sense, they would be expected to rely on public investment to provide them with environmental amenities. Indeed, political ecologists have typically explored how the different perceptions of nature influence decisions regarding green space design and management – for whom and for what uses – acknowledging contested perceptions and practices in urban green spaces (Boone et al., 2009; Byrne and Wolch, 2009; Perkins et al., 2004). While we certainly agree that, in general, "urban poor and minorities remain underserved" (Heynen et al., 2006, p. 5), we highlight that there are multiple ways in which poorer residents can access urban green spaces, i.e., they can either claim them on their own or be otherwise provided with access by the better-off who typically control the distribution of green space benefits. However, green spaces used by lower socio-economic status groups are often of inferior quality, or they are managed specifically to account for the tastes and preferences of these groups.

Low socio-economic status groups can win territorial conflicts related to the use of urban green spaces as a result of active or defensive political anti-elite struggle (Lipsitz, 2007; Ramírez, 2020). Some marginalized social groups may literally take over some green spaces, especially informal and peripheral ones, sometimes pushing other users outside of those spaces (Draus et al., 2021; Xiao et al., 2020). In other circumstances, marginalized groups may benefit from green spaces as a result of activities undertaken by non-governmental organizations, local authorities and other stakeholders. These activities may be conscious and planned (Campbell et al., 2021; Onose et al., 2020) or accidental (or at least unplanned). Our case exemplifies the latter.

Those of high socio-economic status tend to be privileged not only in terms of urban green space availability, accessibility, and attractiveness but also in the context of their control over these spaces (Ernstson, 2013; Tozer et al., 2020). When it comes to the conscious and planned granting of environmental benefits or privilege to low socio-economic status groups, they follow the "pacifying role of spectacle as that of 'bread and circuses' […] the social elite [deploys spectacle] as a form of social control. Very simply, the socially disadvantaged are provided a 'taste of bread' and a day of entertainment, in the belief they will forget their troubles and believe in the authority's benefits" (Waitt, 2008, p. 522; cf. Harvey, 1989). New commercial activities are increasingly welcome by local authorities and sometimes even run by their members in their semi-private interest (Gavriș and Popescu, 2021). Additionally, the socio-economically better off are more likely to resist the organization of burdensome activities in nearby green spaces, while the potential opposition of the worse-off is less likely to be noticed (Owen, 2002; Waitt, 2008). Eventually, regardless of whether it is slaughtering, cooking and eating a pig, or staging motor racing in a park, the mechanism is the same and fits into the overarching neoliberal context.

The postsocialist neoliberal context offers a particularly welcoming environment for organizing popular events in public spaces. It favours private interests over public interests, downplays opposition (which itself is limited due to poorly developed civic societies), and offers multiple opportunities for abuses of legal loopholes, which translates into poor protection of urban green spaces (Domaradzka, 2022; Kronenberg et al., 2020; Niedziałkowski and Beunen, 2019). In postsocialist cities, regulations are typically lax or non-existent because of the limited experience with events organized in public spaces and because of the cherished freedom of economic activity and the primacy of private interests over public ones (Kronenberg et al., 2021b). The uncritical approach towards various events results from the fact that they are seen as engines of economic growth (Cudny, 2016). Furthermore, as our case study also shows, the respective authorities do not collaborate (they have no interest in going beyond their narrow mandates). They prefer to downplay their role and point to others as responsible. In our case, the conservation prescriptions were not observed by the city authorities themselves. Neither the City Forestry Office nor the Municipal Sports and Recreation Centre claim any interest in the festivals despite their impact on the qualities they are responsible for.

The city authorities turned a blind eye to what kind of activities took place in the forest as long as the lessee paid the lease and followed the rule of law and the basic principles of social coexistence. Problems such as noise in the forest were not even considered. The idea to attract more people to the forest proved to be synonymous with bringing in consumers – to ensure that the lessee could pay the lease for the decapitalized site (albeit the consumers could only be expected to pay affordable prices). In this sense, our case shows that the benefits received by the low socio-economic status group were accidental or arose from existing institutional failures rather than from a deliberate strategy to make green spaces more inclusive and, in particular, responsive to the needs of the low socio-economic status group. And it simply turned out that these events became quite successful in terms of attracting the low socio-economic status group.

The provision of urban green spaces to the worse off may not necessarily result from a well-thought strategy. Rather, it is likely to result from the abundance of green spaces to be developed, combined with the scarcity of capital that could be used to invest in upgrading those spaces, i.e., the abovementioned lumpengeography of capital (Walker, 1978). Not all areas can be sold to the same group of people, so some are "sold" or "marketed" to different target groups. In this sense, it could be argued that eco-pauperization/eco-popularization contributes to green growth in the same way eco-gentrification does (McClintock, 2018). Indeed, our example of eco-pauperization/eco-popularization bears a resemblance to eco-gentrification, which is typically not a planned strategy, either. It occurs when favourable preferences of prospective inhabitants and unwary institutions that are not prepared to protect the interests of existing inhabitants coincide, often reinforced by neoliberal settings and the pursuit of green growth.

In the end, who knows what will happen later in Arturowek? The area that has become commercialized to less picky clientele may in the near future follow a "natural" path of gentrification, especially given that this forest already attracts the higher-end residential market (Czembrowski and Kronenberg, 2016) and new luxurious developments, such as the fancy hotel in the other end of this forest.

## 5. Conclusions

We started from the premise that green space benefits are influenced by the perspectives and preferences of various beneficiaries, as well as the institutions involved. And while the better off typically benefit at the expense of the less privileged, the opposite is also possible. Our example of popular entertainment events in the municipal forest in Lodz provides an example of where a low socio-economic status group has benefited at the expense of the high socio-economic status group, whose members typically chose to change their routes in the forest to avoid the nuisance related to these events.

The analysis of the institutional setting within which these events took place indicates that this was not a planned strategy. Quite the opposite. It emerged accidentally, as a by-product of a neoliberal setting within which the city leased a decapitalized resort to a private entity to reduce maintenance costs and attract more visitors to the forest. Linking to the notion of the lumpengeography of capital, we suggest that such disinvested sites are likely to be marketed, perhaps only temporarily, to the less picky lower socio-economic status groups so that they can still be used to generate economic benefits and contribute to economic growth. Per the analogy to eco-gentrification, we call this eco-pauperization or eco-popularization. The low socio-economic status group benefits at the expense of the high socio-economic status group as the character of the events specifically catered to the preferences of the lower socio-economic status groups. Additionally, instead of new investments, the site suffered from disinvestment and environmental impoverishment.

In this sense, the perhaps accidental transfer of benefits to the low socio-economic status group adds to other examples where the lower socio-economic status groups win territorial conflicts related to the use of an urban green space. It happens through active political struggle, or these people are consciously granted such an environmental privilege by the elites who – in this way – perpetuate their own agendas.

### *CRediT authorship contribution statement*

**Jakub Kronenberg:** Conceptualization, Methodology, Formal analysis, Data curation, Writing – original draft, Writing – review & editing. **Edyta Łaszkiewicz:** Conceptualization, Methodology, Formal analysis, Data curation, Writing – original draft, Writing – review & editing, Visualization. **Erik Andersson:** Conceptualization, Writing – review & editing. **Magdalena Biernacka:** Data curation, Writing – review & editing, Visualization.

### Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

### Data availability

Data will be made available on request.

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### Appendix A. Supplementary data

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