

PUBLIC OUTDOOR SPACES AND COVID-19

SYMPOSIUM: 24 -25 JUNE 2021

WAGENINGEN, THE NETHERLANDS

ONLINE

SUMMARIES OF PRESENTATIONS

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PROCESSES OF IN- AND EXCLUSION IN PUBLIC SPACE

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WHAT LESSONS CAN WE LEARN FROM THE CURRENT PANDEMIC?

Participatory Workshop

COVID-19 AND OUTDOOR NATURAL SPACES: UNDERSTANDING AND UTILIZING OPPORTUNITIES FOR HEALTH PROMOTION

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INVESTIGATING BUILT ENVIRONMENT CORRELATES OF PHYSICAL INACTIVITY DURING COVID-19 RESTRICTIVE POLICIES IN THE NETHERLANDS

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Introduction: Our living environment was not designed or built for this social distancing. It has been proved that restrictive policies have the power to, not only avoid infections, but unfortunately cause a dramatic decrease in mobility and daily physical activity with still unclear long-term effects. Since an inactive lifestyle can be a strong predictor of premature death (Hartman et al., 2017), reduced exercise patterns may not only lead to significantly more incidence and death from COVID-19 infections, but also lead to cardiovascular disease and diabetes in the coming years. The need to keep a distance in densely populated areas has challenged planners and designers to rethink the built environment to ensure our physical and psychological health. The measures adopted by governments may have shown, for instance, how important it is to have access to outside spaces to get fresh air and sunlight safely (Pinheiro and Luis, 2020). Or to have proper space for safe walking and cycling in busy public spaces (World Health Organisation, 2020). The space available to ensure safe distancing may vary considerably per street, neighbourhood, or city. Due to the urban structure of our living environment, there are major differences in the width of sidewalks, bicycle paths, green structures, architecture of buildings, and other elements of public space (see, for example, the Social Distancing Dashboard, TU Delft and AMS for Amsterdam), which can be organized in terms of neighbourhood typologies. As widely discussed, the spatial structure of neighbourhood typologies, in combination with the distance to the center and facilities, have important consequences for the movement pattern of residents (Scheepers et al., 2013). At the same time, differently from earlier pandemics, a very large amount of data has been collected, thanks, also, to our smartphone dominated society. The mobility information stemming from these apps can be mined by Google and Apple, which have subsequently made it publicly available (Cot et al., 2021). Nevertheless, not much is known about the effect of restrictions on physical activity of people living in different built environments. **Research questions:** (i) How has physical (in)activity been affected by COVID-19 restrictions across different neighbourhood typologies? (ii) Which spatial indicators within neighbourhood typologies have had high associations with physical (in) activity in light of COVID-19 restrictions? Answering these questions can help identify areas with potentially more vulnerable communities to long-term physical inactivity, plan interventions and policies able to impact inhabitants' behaviour positively.

Approach: To answer questions (i) and (ii), we correlated behavioural data from an ongoing survey about movement patterns during COVID-19 started in April 2020 with a diversity of spatial indicators about Dutch built environments to compose neighbourhood typologies. The survey, composed by about 4000 participants, is part of the Nijmegen Exercise Study, a longitudinal database of more than 20.000 different respondents that have answered questions about their exercise patterns (e.g. frequency, amount of time, mode of transport, etc) before and during COVID-19. Features that have long been backed up by literature in having the potential to influence physical activity and active mobility (e.g. density, design, demographics, destination accessibility, etc) were transformed in spatial indicators and combined to distinguish neighbourhood typologies. Unsupervised Learning Algorithms were used to assist this process of recognizing different typologies (clusters) based on the chosen features and the problem in hand. The postcodes (PC6) available from the NES study enabled us to connect the physical activity change (in MET-min/ week) to the developed typologies and relevant built environment features. Working with typologies can have several advantages: a more policy-connected way

to understand the built environment, a pragmatic way to extrapolate results for policy making and urban design; a goal-oriented way to highlight features from pre-set hypotheses.

Provisional results: movement restrictions resulted in unbalanced changes in patterns of transportation and leisure-related physical inactivity when spatially overlaid with the neighbourhood typologies under development. Density, urban morphology and accessibility to locations seem to be promising features that could help identify neighbourhoods' susceptibility to be more or less physically active after restrictions, as well as prioritize improvement areas

NATURE IN TIMES OF CORONA: ASSOCIATIONS OF NEARBY GREENERY WITH MENTAL WELL-BEING DURING COVID-19

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Previous studies show positive associations between the amount of green space in one's neighbourhood and mental health, or well-being. In this exceptional time of the COVID-19 pandemic, nature near the home may play an essential part in mitigating the negative mental health impacts of the pandemic and the measures to contain it. There is, however, little research on which types and qualities of green spaces are most relevant for mental well-being in general, and during a pandemic in particular.

This study examined the link between having a (green) garden attached to the home, a green view from the main window of the house, as well as the perceived amount and quality of nearby public green areas and streetscape greenery (e.g., maintenance, attractiveness, variety, safety), and impacts on mental health since the onset of COVID-19. Adults residing in the Netherlands (N=521, 66% female) completed an online survey in December 2020 and January 2021. Impact on well-being was measured with an adapted version of the General Health Questionnaire (GHQ-12). Furthermore, the survey included questions on possible mediators, such as the frequency of visits to public greenery and the frequency of contact with, and natural features of the garden. Also information on covariates and potential moderators was collected, such as connectedness to nature and sociodemographic factors (highest level of education, gender, age). The main hypothesis was that the way COVID-19 has affected mental health would depend on access to and contact with greenery in the residential environment.

Associations between the different types of greenery and well-being impact were tested using linear regression analyses. Results supported the main hypothesis. The tests indicated that having a garden and, specifically, a bigger garden with more diverse types of plants, was associated with a lower negative impact of the pandemic on well-being. Thus, bigger greener gardens were linked to higher psychological resilience. In terms of greenery in the neighbourhood, although quantities of both public green areas and streetscape greenery mattered, the quality of the streetscape greenery was more strongly associated with resilience. This association was stronger for female respondents. A green view from the window on its own was also associated with resilience but not as strongly as the other relevant types of urban greenery. When comparing them, results indicated that streetscape greenery was just as relevant for resilience as a private garden.

The results suggest that having well-maintained, attractive, and varied neighbourhood greenery – streetscape greenery in particular – is relevant for the mental health of urban residents, as well as having a green private garden, independent of each other. By improving the understanding of which types of urban greenery contribute to well-being and in what ways, the necessary knowledge will be created for nature to assist in nurturing better mental health and resilience in an urbanizing world.

‘THERAPEUTIC LANDSCAPES’ DURING THE COVID-19 PANDEMIC: NEW THERAPEUTIC MOBILITIES AND INTENSIFIED INTERACTIONS WITH NATURE

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Alongside new geographies of risk, death, and personal and collective topographies of loss (Ho & Madrell, 2020), the pandemic has given rise to new geographies of restoration, healing and respite, and many people across the globe have sought a deepened connection with their natural environments (Pouso et al, 2020; Venter et al., 2020; Soga et al., 2020). It is with these emerging therapeutic geographies in response to the pandemic that this paper is concerned. With the focus on engagements with nature for wellbeing, the paper can be situated in relation to previous research on the healing qualities of green spaces, both in literatures that employ the metaphor of ‘therapeutic landscape’ (e.g. Palka, 1999; Milligan et al., 2004; Milligan & Bingley 2007) and a more general focus in human geography upon the therapeutic qualities of green spaces (e.g. Maas et al. 2006; Lee & Maheswaran, 2011), as well as the considerable literature across other disciplines on the linking of green spaces and health (de Vries et al. 2003). The paper explores everyday engagements with nearby green and blue spaces over the course of 2020 in online, in-person, and walk-along interviews with 30 individuals living in the Netherlands, complemented by photographs and video clips submitted by 13 participants. The findings contribute to the body of work that illustrates the different ways that natural environments are ‘therapeutic landscapes’ that foster wellbeing through material and symbolic interactions.

The findings of this small qualitative study resonate with emerging reports from across the globe, which have noted an increase in recreational use of green spaces over the past year (Derks et al., 2020; Ventner et al., 2020; Rousseau & Deschacht, 2020), reflecting the therapeutic value of contact with nature for mitigating the negative mental health impact of COVID-19 (Soga et al., 2020). The discussion in the paper concentrates around two key dynamics relating to geographies of wellbeing produced by the pandemic, which our data offers insight into: a) the new and contrasting therapeutic (Gattrell, 2013) and detrimental (Paddon, 2020) (im)mobilities that have arisen as a response to governmental restrictions, and b) the intensified interactions and connections with nature inside and nearby the home that had an important impact on wellbeing.

The analysis highlights spatial experiences of seeking refuge and restoration, creation of new social spaces, changing perceptions and valorisations of nature, and therapeutic qualities of everyday slow mobilities in the creation of a diverse set of therapeutic geographies that centre around the ‘healing green’, as a broader ‘genre’ (Berlant, 2008) of the pandemic, highlighting the intensification of practices and emotional investments in green space in response to the pandemic. Our findings detail how the pandemic has given rise to new and adapted therapeutic mobilities focused around ‘nearby nature’, which strengthened place-attachments and contributed to increased and intensified engagements with green space in its various expressions, from intimate relations with houseplants and flowers, to walking and cycling in open landscapes, woodlands, or riverscapes. Across the interviews it became clear that their relationships to green spaces had become both more frequent and intensified in terms of the connection participants felt to their surroundings, and to nature more broadly. The annotated photographs that were sent to us illustrated the embodied, sensory and emotional immersion in nature that contributed to the becoming-therapeutic of their surroundings. While outdoor recreation for most felt close-to-hand and familiar, their relationships with nearby nature qualitatively and effectively changed in response to COVID-19 induced confinement, resulting in the becoming-therapeutic of everyday local mobilities.

SIGNIFICANCE OF GREEN AREAS FOR EMOTIONAL AND PHYSICAL HEALTH AND WELLBEING IN CHALLENGING TIMES – A TRANSNATIONAL STUDY ON THE INFLUENCE OF THE SARS-COV-2-PANDEMIC ON THE USE AND PERCEPTION OF GREEN AREAS

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The SARS-CoV-2 pandemic changed the work and lifestyle of a large number of people completely. Initial studies started examining the changed use of green spaces related to it (e.g. Honey-Rosés et al. 2020, Ugolini et. al. 2020). Studies such as Astell-Burt and Feng (2021) analysed the diverse impact factors such as the higher share of work from home. While in general the impact of nature and green structures on health and wellbeing is explored extensively, the implications of the changed use of green areas for health and wellbeing during the pandemic are a novel field of research. Pouso et al. (2020) focused as one of the few studies on mental health in context with accessibility of green and blue areas.

In an international team, researchers in the field of recreational planning, geography and health sciences have investigated (i) changes in visitation rates of diverse types of green areas, (ii) activities carried out in these diverse types of green areas and free spaces during different phases of the pandemic and (iii) the extent to which contact with nature and staying in green spaces has affected people's well-being and health (emotionally and physically) over the course of the SARS-CoV-2 pandemic. The initial sample of 448 respondents consists of people with a high share of respondents from Italy, Poland and Austria. Questions related to two stages of the pandemic – the initial lockdown period in spring 2020 and the summer/early autumn period with less restriction in place in the countries which were part of the survey.

First results demonstrate a high importance of green areas during the pandemic for the European respondents. Private gardens were the most frequently used green areas during the whole pandemic period. Around 50% of respondents had access to a private garden at least once a week. The visitation ratio of public open spaces, such as urban open spaces, rural areas, forests and protected areas increased in the second pandemic period, when the mobility restrictions were less strict. Asked about symptoms related to their health state, only 14% of the interviewees did not report any negative impacts on their health and wellbeing during the first phase of the pandemic. Anxiety was the most prominent symptom, perceived by about 85% of the respondents, followed by insomnia and depression. At the same time, overall 90 % of the respondents acknowledged that contact with nature positively influenced their health and wellbeing during the entire pandemic period. Respondents attributed even stronger positive impacts to health and wellbeing in the first lockdown period than in the second one. The study examines differences between those people with access to private green spaces and those who could only use public ones and considers the influence of frequency of use of green spaces with regard to perceived benefits on health and wellbeing.

PLANNING FOR UNCERTAIN FUTURES: SHIFTING IDEAS OF CITY AND COUNTRYSIDE AFTER GLOBAL CRISES

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After living through a global pandemic, which has often been associated with cities, many urban Europeans and Americans imagine their post-COVID futures in a rural area. To what extent urbanites are really moving to rural areas is too early to say, as evidence is still based on estimations and journalistic reports. For example, in the UK the number of inquiries from Liverpool city dwellers looking for a village property has risen by 275% compared with 2019, while in Edinburgh and Birmingham inquiries for village property have risen by 205%, and 186% respectively (Marsh, 2020). Similar estimations in the USA point that page views for rural property listed on a large real estate website have risen 10 times more than page views for properties in cities (Rose, 2020). These estimations do not represent actual sales or migration to villages. Yet, they indicate something important – the pandemic changed the ways people imagine their futures.

Being in a crisis involves loss of the idea that future is predictable. As Anderson (2017) and Koselleck (2004) claim, the idea of ‘otherness of the future’ is inherent to crisis, together with change of the sense of time. This counts also for neoliberal societies in general, in which the future is increasingly seen as unpredictable and hazardous (Amin, 2013). This paper will argue that unpredictable futures in times of global crisis are often associated with alternating meanings of rurality and urbanity. Unlike the current pandemic, for example, the previous pandemics caused reverse migrations: people moved from villages to cities in quest for better health care and infrastructure.

This paper takes off from the perspective that such shifts of perceptions of urbanity and rurality after major global crises have been common in history. It offers a comparative angle with two post-war contexts: the city of Mostar after the Bosnian wars (1992-95) and city of Berlin after the Second World War. In post-war Mostar, rurality has been dubbed as a thing from the past associated with ethno-religious segregation in the war-torn country, while the city dwellers of post-war Berlin used to see the countryside as the ideal landscape for their future lives away from the war-torn city. This paper will draw parallels between these global events and the current pandemic and will discuss the ways in which major shifts in history impact how rurality and urbanity are being imagined in relation to uncertain futures. The preliminary conclusions indicate that in all these cases rurality has been associated with greener lifestyles and stronger senses of togetherness and community, while the city itself is seen the territory where struggles for different futures are most intense and visible.

THE QUIETNESS, THE TENSION, THE RELEASE: A PROCESS BETWEEN PEOPLE AND PUBLIC SPACES DURING THE PANDEMICS IN LIMA, PERÚ.

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Cities around the world face the challenges imposed by the Coronavirus pandemic. The case of Lima, the capital of Perú, is not different. A 10 million inhabitants conurbation, used to daily basis chaotic traffic, noise and intensive air pollution, suddenly felt on deep silence and became used to a blue sky. All of it happened during the first 3 months lockdown, back in 2020. Even though the quietness seemed peaceful, the mental health of people started to show traces of stress and anxiety. That was a period of strict restrictions, when only one person per family could leave home to go shopping, by foot or by bike, and should spend the rest of the day inside their place, immersed in uncertainties regarding their work and life. The central government then, decided it was time to let people go outside during few hours, to release the tension. In the highest income's neighbourhoods, the sidewalks were alive, parks were full of people of all ages and the streets invaded by bicycles and scooters. Places that used to be visited only by amateurs and professional athletes started to receive large numbers of citizens. Besides that, the metropolitan government of Lima decided to install an emergency infrastructure to support bicycle mobility in order to avoid agglomeration inside public transportation, minimizing the risks of contamination by the COVID-19. The strategy was to connect the few existents and underused cycle paths to promote safe routes between districts, so people could slowly comeback to their work.

The success of this measure was one of the drivers that resulted on the approval of a national normative which recognized and promoted the use of bikes as part of mobility options and settled general guidelines to install bike lanes in the country. This positive impact is contrasted with a very unequal reality between districts, related to the access of qualified public spaces, especially green areas, and to efficient safe ways to move along the city. Due to a fragmented system of local government, it is estimated that 2/3 of the metropolitan population do not count with a minimal amount of open-air recreational areas, which might imply on lower levels of mental health during the pandemic and represented the areas with higher levels of mortality by COVID-19. There, the tension was not necessary released.

A year later, when walking along the middle-upper class districts, it is notable the change on people's behaviour regarding the use of public spaces, and specially the use of bike. Even though complementary infrastructure such as bicycle parking and signage are still missing, many of the emergency cycle paths are being transformed into permanent infrastructures that create affordable, secure, and easy routes to support active mobilization and recreation. It is estimated that 8% of Lima's population (about 800,000 inhabitants) already use the bike to go working. Nevertheless, the amount of people who use it as recreative activity may be much higher. In 2021, some of the lower income districts already have special lanes for bikes installed along its main avenues, partially connected with the network in the other areas of the city. Investing on mental health care is partially to invest on equitable access to good quality open space (especially green) and guarantee an equitable accessible city. Particularly to the last one, the hope is that the cycle path network will be one of the paths of changing the city into a more inclusive place to live, where the release might be a right, not a gift.

COVID-19 AND THE FUNCTION OF A MARKETPLACE AS PUBLIC SPACE

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Since the start of 2020, the Coronavirus pandemic has and changed the way we think and use public outdoor spaces (Honey- Rosés et al., 2020). Specifically, the Wageningen marketplace has continuously been hosting the market days on Wednesdays and Saturdays for stallholders during the several lockdowns in the past one and a half year. It has led to a weekly scenery where the marketplace has become one of the few spaces where groups of people still meet each other in the public space on a biweekly term. From here, this master thesis explores how COVID-19 measures have led to a change of ascribed function of that public space.

This study departed from a proposition that the function of the marketplace as a public space, would have theoretically been reduced to a space of consumption, as many of the traditional forms of usage of this space, e.g. demonstrating, gathering, playing, socializing and meeting strangers had become strongly discouraged as a result of the measures against COVID-19. These forms of usage were not deemed crucial for living in the way food supply is. Upon observations and qualitative interviewing during Saturdays, however, it has been found that the marketplace in practice seemingly embodies quite the contrary. It has remained a lively social gathering spot and a ritualized form of doing groceries for many people, despite fear and discouragement from the government.

Followingly, this master thesis studies how these findings can be interpreted using a micro-sociological framework within a tradition first proposed by Erving Goffman. This way, the marketplace is approached as a social construct, meaning that it views individuals to construct places as agents, based on definitions, activities, interactions and meanings (Ünlü-Yücesoy, 2013). This has resulted in the following research question: In what ways do measures against COVID-19 continuously impact the function of the public space of the Wageningen marketplace? The elderly visitors, roughly from 70 years and older, form the target group for this explorative study. They form a particularly vulnerable group within the context the pandemic and thereby offer an interesting perspective on how the public space of the market could be deconstructed. Using the method of qualitative interviewing in a semi-structured manner, definitions, activities, interactions and meanings revolving the marketplace come up are put into perspective

Currently a line of argumentation is being assembled from the preliminary findings that allows for a theoretical perspective on the function of the public space of the Wageningen marketplace by discussing its embedded meanings, definitions, activities and interactions from in terms of a new physical dimension. More specifically, upon reading the accounts of the elderly visitors, this thesis is building toward a theoretical discussion about the meaning and implication of physical presence in a public space in a time of pandemic. Experiences of the marketplace of the elderly form and interesting perspective particularly because their physical vulnerability. Nevertheless, many of the subjects report on consistent (bi)weekly visits to the market. It might be concluded that the marketplace, including its traditional and primary function for nourishment (i.e. in terms nutrition, but today more than ever in terms of socialization) is able to broaden our theoretical understanding of (physical) outdoor space. Especially in a context where digital communication systems seemingly gains an increasingly big role in our lives.

REWILDING AT STREET-LEVEL FOR INCREMENTAL GAINS AND A SUSTAINED PROMOTION OF HUMAN WELL-BEING

GIDEON SPANJAR

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People during this Covid-19 year were forced to spend more time at home due to the lockdown and extreme weather conditions. Before the crisis, people already spent approximately 90 percent of their time indoors (WHO, 2013) and relied on nearby public outdoor spaces for social and physical activities to maintain their health and well-being. During the pandemic, unhealthy, overcrowded, uncomfortable outdoor public spaces and a lack of greenery likely encouraged people to stay indoors even more. In city centres, greenery is often scarce: municipalities struggle to find nature-based solutions that meet the multiple functions of these areas.

Fortunately, pandemics appear to spur cities to create healthier, greener environments. The nineteenth-century cholera pandemics, for example, led many western cities to establish large public parks to act as green lungs. These include Central Park and Prospect Park in New York, designed by the influential landscape architect Frederick Law Olmsted. The COVID-19 crisis creates the momentum to bring nature back into our cities and to repair vital ecosystem functions and derived Urban Ecosystem Services (UESs).

In this action-research study we adopted the Panarchy model (Holling & Gunderson, 2002) and its principle that initiatives on a fine-grained scale can eventually have a positive impact on the entire ecosystem. Green interventions at street-level hold the promise that they may activate communities to initiate change for more social-ecological resilience. This paper describes two experimental projects: The Climate Cube, installed at a shopping centre in the Nieuw-West district in Amsterdam, and the Rewilding Stepping Stones in the centre of New Town Almere. The Climate Cube consists of a pergola, large, interconnected planter boxes, and benches on each side. The cube acts as a cool social spot. The aim is to explore how it might improve visitors' (thermal) comfort and to build community support before larger redevelopment projects are launched. The Rewilding Stepping Stones are made of recycled waste materials and planted with native species to encourage nature to return to the city centre. The UESs Model (McPhearson et al., 2015) has been applied to evaluate and structure the potential and derived benefits from street-level interventions and to explore their value for building social-ecological resilience.

The (preliminary) results indicate a high level of public approval for these urban greening and rewilding projects. Incremental gains can be achieved between larger green spaces to improve the permeability of species. Strategically placed green stepping stones in busy, paved spaces improves users' (thermal) comfort, for example at mobility hubs and in areas that residents depend on for shopping and other aspects of their daily routine. Scaled up, the stepping stones could create a green network of various public outdoor spaces where people can easily connect with nature (during a crisis) and restore their well-being according to their specific needs.

ROUNDTABLE PUBLIC SPACES AFTER COVID-19

LED BY KARIN PETERS AND ALEXANDRA RIJKE

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With the participation of **Sanda Lenzholzer** (Landscape Architecture and Spatial Planning, WUR), **Martijn Duineveld** (Cultural Geography, WUR), **Mathias Lehner** (Nextcity), **Lenneke Vaandrager** (Health and Society, WUR), **Frank Suurenbroek** (Faculty of Technology, Amsterdam University of Applied Sciences) and **Marieke de Haas** (Landscape Architecture and Spatial Planning, WUR).

The COVID-19 pandemic and restrictions on movement have changed the relationship of citizens to their streets, public spaces and public facilities. Clearly public spaces must be part of the response to the virus, whether to limit the spread of the virus or to provide ways for people to relax or carry out their livelihood (UN Habitat, 2020).

Roses et al. (2020) pose many questions that relate to the possible influence of COVID-19 on the future design, use and perceptions of public spaces. How will our relationship with public space change? How long will the changes endure? What is the relationship between the design of public spaces and disease transmission? Will the new social behaviours we observe today remain or be ephemeral? Will people's emotional connections with places change? How will the benefits we derive from urban nature change? Have our ideas changed regarding access to public space and 'the right to the city'? Will the pandemic teach us new lessons to incorporate into our street designs? Is the attention devoted to COVID-19 distracting us from the existential challenges of social justice, sustainability and climate change? Or, optimistically, will this global experience lead us to rethink the way we develop and (re)design our cities?

This roundtable focusses on processes of in- and exclusion in public space and what certain restrictions mean for different groups of people.

SOCIAL DISTANCING AND THE PROMISE OF TOURISM

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This paper argues that the prevalent lockdown perception of shared spaces as dangerous will persist and that infrastructure and design of tourism destinations will develop to accommodate this fear to the detriment of the convivial promise of tourism. International tourism as practiced and promoted globally in the post-war era is all about growth, capitalising on public goods, such as city vistas and public spaces open to all. The cities most successful in securing their share of the compound growth rate have started to recognise signs of 'overtourism'. Those suffering from overtourism saw a degree of relief when the Corona crisis put all but a complete halt to travel and tourism. In this context of crisis representing opportunity, staycations and local travel have been highlighted as alternatives yet clear indications are that tourism and travel business will very quickly revert to its unsustainable compound growth model post pandemic. Thereby tourism as we know it with its identified problems and challenges seems set to persist. However, despite this, the paper predicts a slight change. This is not a qualitative change, but more of an acceleration of what has already been occurring in tourism and has to do with how we enact the tourism encounter and engage with other people. Measures of social distancing have impacted how we engage and the possibilities we have for communicating and developing a sense of kinship and affection. The paper argues that the intensification of societal atomisation in Corona times will undermine the real promise of international tourism; which is about cultivating conviviality, a global sense of belonging and citizenry. The paper proceeds to explore some of the spatial ramifications of these development.

Being provocative, the paper at the same time will provide a hopeful outlook. The paper understands tourism as a multifaceted chimera and indeed a complex landscape of power and interests. The promise of tourism as outlined in the provocation, will prevail if we recognize tourism as more than the masses so often associated with the negative sides. The provocation is meant to summon the necessary care to prop up the will to act. Hope is invested in recognizing and coming to terms with the challenges as they exist before us. It is imperative to look at international tourism as it is practiced today with sober eyes and take real radical steps towards changing it. The point is that current COVID measures of social distancing might nudge tourism further into the direction of individualized consumption of the spectacular. In everyday parlance; we have taken steps towards normalizing even further bucket list tourism whereby destinations and experiences are ticked off via social media without much of an engagement with the place and its people. To live up to the convivial potential of tourism not so many guests are needed, nor from so far away and to realise this promise we ourselves do not need to go so far. Producing provocative images of the spatial ramifications of social distancing in tourism the paper proposes site based alternatives and destination strategies. These however need to be understood in the context of the overall tourism system and its growth paradigm in terms of how far, fast and for how long people travel and what they consume, as indeed tourism as currently practiced is bearing the seeds of its own demise, not least from a climate perspective.

MANAGING INTERNATIONALLY MOBILE BODIES IN A WORLD ON HOLD: MIGRATION, TOURISM AND BIOLOGICAL CITIZENSHIP IN THE CONTEXT OF COVID-19

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Health geographers like me who study international medical travel – where people cross international borders for medical treatment not (perceived as) accessible in their regular countries of residence – have focused largely on internationally mobile patients with *non-communicable* diseases and ailments, as well as the diverse commercial and governmental bodies world-wide that welcome them as lucrative, non-threatening, short-term care consumers ('medical tourists'). Such international mobility can be interpreted as a manifestation of transnational 'biological citizenship' (Rose & Novas, 2004), where the biological functioning of one's body becomes increasingly central to one's individual and collective identities, generating novel spatio-relational configurations of care demands, resources, and economies that transcend the confines of a single nation-state (Ormond & Kaspar, 2018).

By contrast, the configurations of care and protection forming around the 'biological citizenship' of people (potentially) with *communicable* diseases manifest very differently, especially when borders are involved. For centuries, authorities of polities – cities in earlier times and, in modern times, also nation-states – have deployed disease-control strategies that entail monitoring people travelling into their territories, their points of departure and the nature of their (human and more-than-human) encounters along the way for (detectable symptoms of) communicable diseases classified over time as public health threats, eventually isolating those (potentially) infected in quarantine, barring their entry or deporting them. These attempts at rendering the otherwise 'invisible enemies' of contagion visible, controllable, and expungable have relied on exclusionary bordering practices, such as the drawing of sanitary cordons to isolate and protect inhabitants' health and the placing of movement restrictions on specific mobile populations suspected to be more prone to carrying communicable disease from one polity to another (Tognotti, 2013). The contrast between mobile bodies framed – whether individually or collectively – as either biologically non-threatening or threatening and the diverse bordering practices enacted in response to them reflects the highly conditional nature of hospitality to and protection of vulnerable Others extended by nation-state authorities, whose legitimacy is in part predicated on protecting and caring for those 'legitimately' residing within their national borders.

The novelty and severity of COVID-19 and the ease with which it is presently understood to be transmitted led to the rapid imposition by national governments of far-reaching, unprecedented international travel restrictions in the first half of 2020 throughout the world. Such restrictions meant that the 'biological citizenship' from which paying patients with non-threatening non-communicable conditions had previously benefited in order to move across borders for treatment had been trumped, from one day to the next, by the potential threat of their bodies – of *every* body, with extraordinarily limited exception – being exposed to and becoming vectors for the international spread of COVID-19. Indeed, national governments around the world seeking to stem the growth of COVID-19 were forced to quickly scramble to establish "a new matrix to distinguish risky and unnecessary mobilities from those considered necessary and legitimate" (Scheel, 2020) based on little more than a tenuous grasp of COVID-19's functioning.

It is on these reactive 'scramblings' by national governments to distinguish between 'essential'/'legitimate' and 'non-essential'/'illegitimate' international mobilities in the first half of 2020 and the quandaries they encountered in drawing such distinctions that I focus this brief presentation. In deploying Rose and Novas's (2004) notion of 'biological citizenship' as a lens through which to explore how the COVID-19 pandemic offers new perspective on age-old political dilemmas of controlling the spread of contagion and its management, I bring into focus novel spatio-relational configurations of 'biological trust' in the form of bubbles, bridges, and corridors; biological risk loopholes; and biologically inclusive

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immigrant regularization policies. In a time where a 'new normal' future seems inevitable, with COVID-19 and the threat of other new viruses looming large, it is key to develop lines of research that explore what governmental actors have learned, and continue to learn, about bordering, distancing and segregating bodies from their national, bi-lateral and multi-lateral 'scramblings' to respond to the dramatically disorientating dilemmas induced by COVID-19's emergence. Given many national and local receiving contexts' seemingly new-found awareness of their extraordinary dependence on international tourists and migrants, it is likewise urgent to pay attention to the discourses, techniques and technologies through which tourists and migrants' shifting individual biological conditions are being, and will in the future be, perceived, measured, reported, and scrutinized, as well as the ways in which such data will circulate, within and across borders to facilitate or inhibit increasingly personalised international mobility. It will be vital to make increasingly visible the ways in which our biological identities articulate with our political identities in an ever-more globalized world.

COVID-19 IMPACT ON PUBLIC SPACE: URBAN TRENDS FROM DUTCH CITIES BY A COMMUNITY OF PRACTICE

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Abstract. During the COVID-19 pandemic, public spaces are being redesigned and revalued. In the ZonMW project 'From Prevention to Resilience', we aim to understand these changes both in the short term, mapping the more ad hoc responses to the pandemic in public space, and in the long-term, exploring how public space can promote urban resilience with an eye on future shocks and stressors. Here we report on a series of interviews several partners from the community of practice involved in the project. The aim was to get an initial understanding of trends concerning public space during COVID-19 in cities in the Netherlands. Based on the interviews, we have identified two main trends. The first trend concerns the rapid shift towards soft mobility, reflected in the increased pedestrian activity in residential urban areas; people started to walk and cycle more to commute and relax. The second trend refers to the increasingly versatile use of green outdoor places, attracting a more diverse group of users than before the pandemic. We suggest the identified trends help in looking ahead and considering the roles that public space can play in post-COVID cities. More specifically, they feed into two of the research goals that drive the 'From Prevention to Resilience' project. First, the trends help in anticipating needs and responses during future pandemics, and, as such, they offer initial handles for urban designers and planners to pro-actively create public spaces accordingly. Second, the trends enable us to look beyond COVID-19 and consider the resilience of cities and their neighbourhoods in a more integral manner. In particular, the trend towards greener public spaces invites us to look at resilience from both a social and ecological perspective, acknowledging their potential to enable versatile use, foster social cohesion, and contribute to the goals of climate adaptation and biodiversity.

Interviewees:

- Diana Krabbendam and Emiel Wolf, The Beach
- Charley Fiedeldij Dop, Pakhuis de Zwijger
- Boen Groothoff, Amsterdam municipality
- Judith Lekkerkerker, Almere municipality
- Annelies Bloemendaal, Almere municipality
- Henk Snel, Zwolle municipality
- Like Bijlsma, Netherlands Environmental Assessment Agency
- Sarah Chekh Ibrahim, Breda municipality
- Filippo Lodi, UNStudio | UNSx
- Beata Giermasinska,

NATURE-INCLUSIVE DESIGN OF PUBLIC SPACE IN CITIES: HEALTH & WELL-BEING WHILE & POST COVID-19

MATHIAS LEHNER

nextcity.nl

During covid-19 it became clear that our relation with nature is more important than we had anticipated. Especially in cities, the lack or prohibition to connect with public green and blue networks had negative consequences on our wellbeing. Because today 30% of public urban space is assigned to roads and cars there are lessons to be learned.

In the past the profession of architecture has always tried to set humans apart and above nature by design. Today this position is untenable as biodiversity is decreasing (Kolbert, 2014) and climate is changing. The Anthropocene (Crutzen, 2000) is the result of human action and characterized by a huge growth of spatial demand. In particular cities grow in Asia but also in Europe, with one million new houses projected in the Netherlands below sea level (PBL, 2021).

The Hypothesis for the Next City as a new initiative inverts the negative impact of humans upon the planet and calls for the potential to react, reconsider and reconcile (Van Stiphout & Lehner, 2019). The basic notion of the Next City's hypothesis is that humans and cities are also nature, alas a somewhat rocky habitat. Its ecosystem services (Geneletti, 2019) can be increased by employing design and social strategies. Based upon the principles of city resilience (Stockholm Centre for Resilient Cities) these are connectivity, modularity, redundancy and porosity in combination with diversity, stewardship and proper communication. In the past 40 years a growing amount of architectural designs bring landscape into the city (Balmori, 2010).

The current pandemic however has changed basic spatial notions. Firstly, human scale itself has increased due to the need for social distancing: today, one single human measures 1,50m in diameter. The second lesson painfully learned is that the well-being of humans depends on the connection with nature. Forcing people in cities to stay in their homes and prohibiting them to use (green) public space results in serious health issues, such as burn-outs (Zilveren Kruis, 2020) and domestic violence (Vienna Police Department, 2021). On the other hand, recent research shows that (re)connection with nature contributes to well-being (Hermans, 2021; de Vries, Maas & Kramer, 2009).

These changed basic spatial notions result in the need for even more space in urban planning. Space for nature-inclusivity can be created in buildings (facades, roofs), but streets and public space taking up an average 30% of a city (UN Habitat, 2013) represent a huge potential to establish a nature-inclusive network using existing urban structures. Today this network is predominantly occupied by moving or parked cars (World Bank, 2013). Reducing space occupied by cars frees space for human well-being. Stimulating walking, biking and the use of public transport in a model of the 15-minute-city decreases 'car space', as do decreasing speed, centralizing parking, double land use and applying technology for shared and self-driving cars (Degenkamp, 2021).

Various European cities already radically decreased car-space and swapped it for bike lanes (Paris, Milan, Brussels) during COVID-19. The effects are more safety (less accidents, easier crossings) and health (due to physical exercise), next to economic revenues (BUF, 2017). Seen from an integral and spatial point of view this somewhat ad hoc development in urban public space improves the 'grey infrastructure'. But it represents an immense opportunity to come to a green-grey infrastructure by adding nature-inclusive elements required for the well-being of urban dwellers.

Recently realisations of public spaces (Utrecht, Maastricht, Paris) deliver ecosystem services such as tempering heat islands, buffering excessive rain and absorbing fine dust – in short a substantial contribution to climate adaptation and quality of life. Strengthening existing green-blue networks and realizing an integral green-blue-grey infrastructure results

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in even more benefits, as recent architectural projects demonstrate (Amsterdam, Breda): they contribute to resident satisfaction, local recreation, community gardening and improve biodiversity.

Summing up, a crucial lesson from COVID-19 is that city dwellers need to connect with nature to stay healthy. Reclaiming parts of the 30% of city space today predominantly used by cars is a huge opportunity to boost quality of life in the city during and post COVID-19, while at the same time contributing to climate adaptation and biodiversity, the two largest challenges of our time.

Participatory Workshop

COVID-19 and Outdoor Natural Spaces: Understanding and Utilizing Opportunities for Health Promotion

PARTICIPATORY WORKSHOP: COVID-19 AND OUTDOOR NATURAL SPACES: UNDERSTANDING AND UTILIZING OPPORTUNITIES FOR HEALTH PROMOTION

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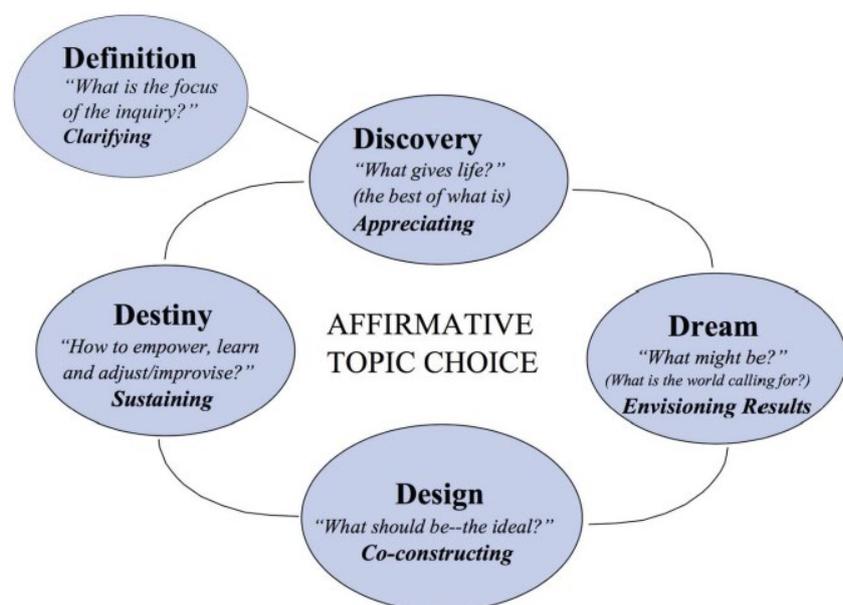
CANCELLED

Participants: we invite researchers, practitioners and students, no specific knowledge or background is required

The COVID-19 pandemic and the associated public health responses have put a severe strain on people's ability to maintain and develop their health and wellbeing. As a response to the continuously changing crisis context and consequences on our everyday life, natural outdoor spaces have become a resource in which people restore depleted physical, social, and mental resources. For example daily lunch walks, forest walks, community gardening etc.

Inspired by the salutogenic model of health, this participatory workshop aims to understand (1) how natural outdoor spaces have been mobilized as an everyday resource for our health and wellbeing during the pandemic and (2) how to maintain and further strengthen the (un)tapped potential of the outdoors for health promotion after the crisis. The workshop output will be used for developing an infographic about health promotion initiatives that emerged in natural outdoor spaces during the pandemic, which can guide health promotion practice and research in the post-COVID-19 area.

Using appreciative inquiry, we will facilitate a mutual dialogue in which we explore the current health-promoting initiatives in natural outdoor spaces (**clarifying**), why these initiatives are worth exploring in the workshop and how they emerged (**appreciating**). Consequently, we will discuss how the selected initiatives can serve as health promotion interventions after alleviating the measures and for what purposes (**envisioning results**), how their potential can be strengthened (**co-constructing**) and maintained (**sustaining**).



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