

Politicizing air: on the political effects of spatial imagination

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1. Introduction: “the whole thing moves around”¹

Air is invisible, though it has very real effects on our health and on the natural and built environment. Air is intangible, but that does not mean it is immaterial. Air’s components and pollutants are situated on the microscale, though effects can be observed on a macroscale. Air (and its pollution) are both natural and human-made. Air is hybrid, but its hybridity does not speak to us immediately. Air is untouchable though we are touched by it all the time. Air is often forgotten in social or academic discourse (Buzzelli 2008, Heynen 2013), though we cannot live for longer than a few minutes without it. Air is seldom the direct object of planning and policy decisions. Still, the latter can have decisive consequences for the composition of air. Air’s components interact and create new substances producing effects up to thousands of kilometers away from where they were initially formed. Air is extremely mobile and transgresses national borders. Bad air’s effects are often as invisible as its causes. Adverse health outcomes appear suddenly, as a result of the invisible build-up of exposure over time. Air does not differentiate between rich and poor, black and white, men and women. Yet, “unequal power relations are as likely to be ‘inscribed’ in the air [...] as they are to be ‘embedded’ in the land” (Bryant 1998: 89).

In other words, air is a strange object. Air pollution is represented as composed of layers of natural and human-made pollution issuing from transboundary, national, urban and street level origins. It emerges from sources as variable as agriculture, traffic, industry, building works and heating. Pollutants behave in a wide variety of ways: mixing, (re)activating or deactivating each other, dispersing or finding (through sedimentation) - more or less easily - their way to the ground again.

Interestingly, popular discourse on air pollution is very much built around its chemical components and therefore appears to stay remarkably close to a scientific understanding of air. However, this should not blind us to the discursive process that inevitably takes place in the translation from chemical composition to political construct. Air pollution does not put itself on the political agenda. A whole range of actors, from atmospheric scientists to policy makers, air pollution activists and physicians, are involved in giving air and its pollution tangibility or visibility (Kenis 2020). However, popular understandings of air often fail to take heed of this translation and the inclusions and exclusions that it involves. What we are left with are artefacts like Particulate Matter (PM) or Carbon Dioxide (CO₂) around which citizens are mobilized.

This chapter investigates how these artefacts operate in political discourse, unpacking the meanings and imaginaries attached to these constructs, analyzing the strategies through which they are mobilized, and emphasizing the spatial dimensions of their construction. The focus is on how specific

¹ Quotes are taken from in-depth interviews we conducted with 30 campaigners, policy makers and atmospheric scientists in London in Spring 2017.

ways of spatially imagining air contribute to its (de)politicization. In his article ‘Space as a mode of political thinking’ Mustafa Dikeç (2012) argues that “different spatial imaginaries inform different understandings of politics”. This chapter reframes the question and asks what kind of spatial imaginaries facilitate processes of (de)politicization, focusing on the construction of bad air and its mobilization in London in 2014-2018, a period when the issue was particularly salient in the city (Kenis and Barratt forthcoming).

In the first instance, we outline the theoretical rationale for this question, showing the limits of Laclau’s framework for understanding the role of the spatial in politicizing air, and exploring Sartre’s social and political theory for adequate conceptual tools. Subsequently, we illustrate our argument by exploring the shift in focus, amongst campaign groups, from climate change to urban air pollution in London in the period 2014-2018. Victories in the air pollution struggle, it was conjectured, would not only be easier to achieve, they would also indirectly benefit the climate struggle. Our argument is that the successful dynamics of mobilization and politicization around air pollution in London can at least partly be explained by the specific ways in which air pollution was spatially imagined or represented. The empirical argument is based on participant observation in the work of atmospheric scientists, in-depth interviews with air pollution campaigners, scientists and policy makers, focus groups with primary school kids and teachers, and participation in dozens of seminars, conferences and debates.

2. Politicizing what escapes us

Inspired by the work of Husserl (1970), Laclau developed an understanding of the social as grounded in acts of political institution whose very contingency can be forgotten as a result of processes of sedimentation and routinization (Laclau 1990, 1994, 1996). The key question then becomes how the original moment of political institution can be reactivated. Marchart (2018) underlines that this requires new struggles. That does not mean that old fault lines and antagonisms are simply reproduced: new fault lines can reopen the contingent and political nature of the social and repoliticize it as they make the lack of ultimate ground of the social visible.

Importantly, in this approach, the social, as sedimented, is understood as discourse, a complex structure of relations between elements which acquire meaning as a result of these relations. Because of this particular understanding of the social, it is possible to cartographically map it, Marchart has argued: social objectivity “is by nature spatial” (2014: 274). As he writes in *Thinking Antagonism*,

the social can [...] be defined as a relationally articulated spatial structure whose original institution resulted from an act of radical negativity (i.e. antagonism) which later became forgotten, but in any moment can be reactivated through the experience of dislocation, i.e. time (2018, p. 95).

The resulting ‘maps’ are spatial representations of discourse or discursive structure. The reactivation of the moment of political institution through new forms of antagonism can also be represented in spatial terms: us ‘here’ versus them ‘there’. In his analysis of populism, for example, Laclau (2005) provides a series of spatially configured ‘mappings’ of relations of equivalence and difference between the relevant discursive elements. Laclau is adamant that the institution of the social cannot be reactivated as a whole at once. Politicization requires the construction of a kind of relief in the social, which can be understood in spatial terms. Laclau’s notion of the equivalential chain is key in this regard: it demarcates a rupture in the social space.

This chapter investigates to what extent the differentiation between ‘us’ and ‘them’ requires certain forms of spatial imagination. Whereas Marchart argues that the social is a structure that can be cartographically mapped, we will investigate how cartographical mapping or imagination facilitates processes of politicization. The complex relation between air, the political and space, however, confronts us with certain limits of the discourse-theoretical approach of Laclau, Mouffe, and Marchart

(originally formulated in Laclau & Mouffe 2001). The very generic and formal mode of conceptualization of discourse theory does not provide sufficiently precise conceptual tools to understand the specific challenges which the politicization of air entails.

Admittedly, the social structures causing air pollution can be understood as politically instituted and sedimented. However, 'bad' air as such is a different matter. Air pollution is at best an unintended consequence of processes of institution and sedimentation. There is a spatiality of air pollution and its distribution which seems to escape the spatiality of discourse. This confronts us with the need to look beyond Laclau, Mouffe and Marchart, for an alternative or amended account of 'institution'. Sartre's analysis of how human praxis constitutes the social (Sartre 2004, 2006), which, like Laclau's account, has its roots in a creative appropriation of Husserl, provides a fruitful starting point.

Sartre's *Critique of Dialectical Reason* can be read as an early formulation of post-foundational insights. Sartre theorizes the social through the concept of the 'practico-inert', which is the complex structure of worked matter, from the built environment to modes of production, from ideological discourses to political institutions. Sartre understands this concept both spatially and temporally. The practico-inert is a strange kind of structure, because it appears to be moving, it is characterized by divergent temporalities, and includes forms of worked matter (machines, economic systems...) which appear as quasi-animated: they can absorb or even dominate human freedom. The practico-inert is produced through individual and collective praxis, and praxis establishes an antagonism (potentially only latent) as a result of scarcity. In a finite world, each appropriation and transformation of matter can affect others, even far away, and this effect can be deadly, Sartre stresses. This implies that no praxis can remain innocent. We thus arrive at a theorization of antagonism which is more 'material' than the model of discursive exclusion which Laclau and others operate within. Whereas for Laclau every act of institution of the social excludes alternative possibilities and might thus generate antagonisms, for Sartre, every act in principle affects others in a finite, material world, which can thus become an arena of potentially violent antagonism.

What distinguishes Sartre most significantly from a Laclauian post-foundationalism, however, is his analysis of how the establishment of meaningful social objectivity through praxis can turn against its agent. The social object can get lost or escape us and be transformed into something else: its social meaning can be altered, alienated or lost. Sartre develops a range of concepts to analyse such processes, the most relevant of which in this context is counter-finality (Sartre 2004, Turner 2014). This notion refers to unintended consequences of recurrent acts, which, inscribed in matter, turn against their agents, and thereby undermine their original finality or intention. This counter-finality can have a peculiar spatial dynamic of its own: a praxis on a specific place can have effects somewhere else, for example, and dealing with them then requires specific spatial strategies.

Interestingly, Sartre illustrates his argument with a discussion on air pollution. Bad air arguably affects both employers and workers, Sartre suggests: it has an impact on both classes' health, and represents costs, also for the bourgeoisie. Yet, Sartre analyses how the bourgeoisie refuses "to constitute this effect of industrialisation as a universal counter-finality" and tries to evade it (Sartre 2004: 195). In other words, counter-finality can be interpreted, discursively constructed, and acted upon in different ways: as a threat that affects all people 'universally', or as something which certain groups of people can evade through specific strategies, while others cannot. These strategies, Sartre argues, are inherently spatial. The bourgeoisie can go and live outside of polluted neighbourhoods, limiting their exposure to pollution as "the employers merely *pass through it*" whereas workers live amidst the pollution. It is even through such strategies, Sartre contends, that the bourgeoisie became constituted as a class. Because of its different spatial insertion in society in relation to air pollution, this class became visible as a "special group" (ibid: 195). In combination with the work of Laclau and Marchart, this analysis contains operative tools to analyse the specificity of the strange object that air is, and how it can be politicized.

Sartre's political analysis crucially turns around spatial notions: in daily life, when we are separated from others (Sartre calls this type of social relation the 'series'), we experience ourselves as in the grips of an anonymous 'elsewhere'. The emergence of collective struggles (or what we call 'politicization') can change this experience and turn this ungraspable 'elsewhere' into an identifiable 'here' or 'there'. The power of the state, for example, is 'there'. It is a visible, and therefore contestable locus of political action. The power of the group (which is Sartre's term for collective action), in turn, is 'everywhere' (Jameson 1971, Sartre 2004). In an authentic collective action, every individual is empowered, and a specific spatial dynamic emerges whereby everybody appears as the centre of the action. The dynamic of politicization is rooted in such spatial transformations whereby spatial anonymity is overcome and political agents or powers acquire an identifiable location. For example, it is because "the centre of a market is *always elsewhere*" that the market affects us without us being able to struggle against it and politicize it (ibid: 287). Politicization requires that we can turn this elsewhere into a there: *that* bank, *these* multinationals are to blame for our predicament, for example. This transformation of our spatial experience, we contend, requires a process of political discourse construction.

The politicization of air certainly involves the re-actualization of the original, contingent moment of the political institution of the social through the staging of new antagonisms. But conceptually framing the issue in such discourse-theoretical terms gives us only part of the answer to the question of how this process of politicization actually happens and what role space plays in this context. Sartre helps us to move towards a more refined understanding. Deciphering the meaning that counter-finality might have for us requires a contingent process of interpretation, which also includes a spatial rearticulation. Is polluted air a 'universal' counter-finality which affects us all? Or should we construct it as socially and spatially differentiated, affecting some more than others? Because counter-finality is experienced as not precisely localizable, each attempt to politicize it requires a spatial construction. Making the invisible visible is a question of turning the anonymous 'elsewhere' into an identifiable 'there'. The question, then, is to what extent particular constructions produce a visible opponent.

3. A global thermostat?

Climate change comes to us as a series of artefacts: CO₂, 350 ppm (parts per million), 2 degrees Celsius. From 350.org to the 10.10.10 campaign: climate change initiatives tend to put chemical compositions, figures and numbers central in their campaigns. More than ever before, scientific discourse has found its way into broader society. Never was the chemical so close to us. When such representations enter society, they are imprinted with a whole set of meanings and imaginaries. Part of this meaning relates to spatial characteristics, the places where these pollutants have been emitted, how they disperse, where and on which scales their effects will be experienced, the spatial injustices following from this, and the spatial nature of the struggles to address them. It is our contention that this spatiality is a crucial though often overlooked key to the (de)politicization of environmental questions.

The past decade has produced a burgeoning literature on the depoliticization of climate change (e.g. Bond, Diprose & Thomas 2018; Kenis 2019; Machin 2013; Maesele 2015; Swyngedouw 2010). This depoliticization is attributed to a whole range of discursive constructions, most importantly the externalization of the enemy in slogans calling us to 'act on CO₂' (Swyngedouw 2010). In such a discourse, 'we', humanity as a whole, come to stand against a disembodied and socially externalized enemy. This representation is underpinned by yet another construction, namely the artefact of a *global* temperature which would be the result of the build-up of a *global* excess of CO₂ (Hulme 2014). In this way, climate change is represented as a *global* problem, arising from *global* sources, having *global* effects and in need of *global* solutions. However, in actual fact, a global temperature does not exist. This artefact is but the (imperfect) result of a complex calculation of a large number of local temperatures. Moreover, what matters to human beings is not global temperature but local weather phenomena. The lived risk of climate change cannot be grasped through a scientifically constructed number but entails very localized floods, droughts and hurricanes. In other words, an insufficiently

understood or theorized way of looking at the depoliticization of climate change is that it is precisely the lack of spatial differentiation in the *imagination* of the issue which leads to the homogenization that informs a typical ‘all together in the struggle against CO₂’ discourse (Swyngedouw 2010).

In the period 2014-2018, we observed a shift of focus amongst environmental campaigners from Carbon Dioxide (CO₂) causing climate change, to Particulate Matter (PM), Nitrogen Dioxide (NO₂) and to a lesser extent Ozon (O₃). We contend this is at least partly the result of this experienced failure to generate sufficient political passion and indignation around climate change. Several of our interviewees explained how their pivot to urban air pollution was the result of a strategic search for a focus that could more easily trigger public engagement. Furthermore, the wager was that measures taken to tackle urban air pollution would at once help the struggle against climate change. As a campaigner enthusiastically proclaimed: “It’s much more relevant, it’s happening now, it’s people, it’s much more relevant to talk about”. A spokesperson of another campaign group clarified that

climate change sometimes seems very abstract, it seems to be what is happening at the polar caps, but air pollution is happening ‘here’ and ‘now’ and you can feel the impacts, and people are concerned about health. So, it is an air pollution campaign, but it is [...] a climate change campaign for us as well.

In the period 2014-2019, an unprecedented mobilization around air pollution took place in London. A variety of action committees – from primary school teachers to nurses and doctors, community workers, parents and business representatives – sprang up like mushrooms, and air pollution was put centrally on the political agenda. While many campaigners, scientists and policy makers explain their success in terms of discursively connecting the issue to personal health, we argue that a subtle spatial dimension has been key to the force of their discourse and the related strategies for mobilization. Uncovering this spatial strategy is crucial to understanding the process of politicization which took place. Importantly, another specific set of pollutants and chemical artefacts, especially PM and NO₂ and to a lesser extent O₃ and a number of other substances, constituted the focal point of this politicizing dynamic. A typical feature of these pollutants is that their distribution is characterized by specific patterns of spatial differentiation.

4. Mapping air

The air in London has been bad for decades, but it is only relatively recently that a process of politicization took place which turned bad air into the high stakes of a media driven political debate (Kenis and Barratt forthcoming), including an intense, agonistic conflict, pitting action groups, civil society organizations and scientists against the government. As an atmospheric scientist, interviewed in spring 2017, verified: “air pollution has had a much higher profile in the last two or three years than [...] in my whole career. Now, air pollution is big news, especially in London”. Interestingly, and counter-intuitively, there does not seem to be a direct or unilinear link between how bad air quality is and the extent to which people mobilize around the topic. Because of its largely invisible and intangible character, the air can be bad but need not be immediately experienced that way. Furthermore, having legitimate concerns is often not enough to generate a dynamic of politicization. What was it then that turned air into a topic of contention and debate? The discourse theory defended by Laclau, Mouffe and Marchart provides an ontological argument showing that new antagonisms can reactivate the original moment of political institution. But the ‘ontic’ question remains: why now, and how precisely? As we will argue, spatial imaginations play a crucial role in this process.

Air pollution, its forms and shapes, its spatial distribution and uneven effects, can be seen as the contingent product, the unforeseeable counter-finality, of human praxis. The power relations “inscribed in the air” (Bryant 1998: 89) have become invisible, however: the temporal and spatial link between originating praxes and resulting bad air has been severed. The reactivation of antagonism

therefore requires a work of interpretation and reconstruction, and in relation to air pollution, mapping exercises appear to play a crucial role in this regard. In the period 2014-2018, thousands of citizens have engaged in mapping polluted air in London. Armed with diffusion tubes, they colored London's street maps with green, yellow and red dots. The importance of these activities is not only, or primarily, that these activities have enabled the production of a more refined picture of the air by involving large groups of citizens in data collection, exemplifying the quick rise of citizen science initiatives during the last decade (Cooper and Lewenstein 2016). Through these activities, participants also started to experience the environment they live in differently, unfortunately mostly in a negative way. As the people we interviewed or spoke with explained, their immediate environment started to appear to them as filthy, unhealthy, bad or something to be avoided. They started to worry about walking along the roadside, about cycling or scootering to work or school, about taking the bus or the underground, and in the end even about exercising or playing in London's greenery. Some described how they started to observe bodily experiences like coughing and an itching nose, which they did not notice before. As one interviewee described: "I was actually thinking OMG I know this is now breaching the blood-brain barrier and my sinusitis, I can see them going swelling up, which is what NO_x does ... I made that link much more because I knew what it was doing to my body". The more involved people became, the more this worry started to make place for feelings of anxiety, anger, frustration and indignation.

As we will show in the detailed description that follows, the activity of massively mapping bad air, and all the emotions it triggered, have been key to mobilization. Previous attempts to politicize the air, such as the European Environmental Agency (EEA)'s discursive framing of bad air in terms of the absolute number of deaths per year in Europe and the loss of life expectancy per European citizen, had limited effects. As an atmospheric scientist recalls:

For a long time, the health community would only support a statement of an average loss of life over the population, and the number was around 6 months and people tended to say 'well, that doesn't sound too much, I don't care about that'. But since [...] came up with a report that said 'well for some people it could mean 10 years or whatever, and others may not lose anything at all ...' that changed. Only, the difficulty is we don't know who they are [laughs].

It was only when the focus shifted to bad air's differentiated and uneven distribution, and especially to how this distribution could be spatially visualized, that a process of politicization took place. First, the focus shifted from the European to the national and urban scale. London showed up on maps as one of the most polluted cities in the UK. The calculation that 40,000 people would die prematurely because of air pollution in the UK, (9,500 of which in London) attracted a lot of media attention (Kenis and Barratt forthcoming). But the figures did not immediately lead to mobilizations or collective action. As a health advocate explained, the trouble is that "[air pollution] is an invisible killer. It is something that people don't see happening. You never will have air pollution on your death certificate".

In the years after, the differentiated effects of air pollution came more visibly to the fore. First, awareness grew on how air pollution affects people's health across a lifespan: from lower birth weight to smaller lung development, from an increased prevalence of asthma to reduced cognitive abilities, from diabetes to dementia, from lung problems to heart failure. Air pollution was no longer about a vague, not clearly identifiable number of deaths, an undefinable elsewhere. It seemed to be 'everywhere', in people's lungs, brains and blood, and 'everyone' seemed to be affected by it in a wide variety of ways. Stressing the need for urgent action, an interviewee called out: "can you imagine what that is doing to us?" On the question "do you know someone who died because of air pollution?" the answer was increasingly: "we are all and continuously dying because of air pollution in a certain way". The spatial imagination of air pollution shifted: from 'nowhere' to 'elsewhere' to 'everywhere'. Meanwhile, the question *who* was affected by air pollution was also answered in a different way. Maps indicated some neighbourhoods were particularly harshly affected. A significant correlation between pollution and deprivation came to the fore (Brook & King 2017).

From this point onwards, two tendencies can be distinguished: on the one hand, attempts were made to politicize air pollution along the lines of class and race. As Black Lives Matter activists protested during an action blocking London's City Airport in September 2016, "black people aren't the first to fly, but they are the first to die". On the other hand, with an increasing focus on the microlevel of individual streets, buildings and bodies, the mapping of the air became always more refined. The publication of the yearly NO₂ values for all primary schools in London in *The Guardian* in Spring 2017 was crucial in this regard. A wide range of action committees were set up following this revelation. When a nine-year-old girl's fatal asthma attack was directly linked to local spikes in NO₂ and PM₁₀ air pollution's face became clear (Marshall 2018).

Both tendencies mixed up in a dynamic process of mobilization and debate. Figures were published showing how many of the schools exposed to badly polluted air were located in deprived neighbourhoods or areas with a mainly BAME or deprived population (Vaughan 2016). The nine-year-old girl Ella, who died from a fatal asthma attack, lived in one of London's poor neighbourhoods close to the South Circular road which she walked almost every day.

Air pollution was increasingly 'mapped' in a socially and spatially highly differentiated way. A double process seemed to be at play. On the one hand, polluted air was everywhere. One could hardly escape from it. It moved around in a barely graspable, yet uneven way. As one interviewee called out angrily: "It's everywhere. You can't escape it. Even in the residential areas the pollution is really high". 'Background pollution' became part of the urban dictionary and symbolized the polluted air urban dwellers were trapped in. On the other hand, this 'everywhere' was increasingly translated into many different 'here's' and 'there's'. By taking sidewalks and avoiding the big streets, particular crossing points or neighbourhoods, people regained at least a little bit of control. Public information campaigns recommended keeping a distance from the street side and transporting babies in a carrier instead of a pushchair to avoid proximity to the exhaust emissions of cars. In this way, the problem was increasingly constructed on the microscale. At the same time, the air became mentally portrayed as multi-layered and differentiated, both horizontally and vertically, in often complex and sometimes surprising and unpredictable ways. New studies showed how trees, that are assumed to purify the air, could actually prevent the pollution from dispersing (DEFRA 2018). Others investigated how pollution levels vary between the ground level, first, second and third floor (Wong 2019). Researchers actively disseminated this growing body of scientific evidence through press releases, public lectures and YouTube videos. The highly movable nature of air and the main sources of pollution (most importantly cars), made the picture even more intricate. What was a pollution hotspot one day, was not necessarily so badly affected the next day.

As the movement of air can barely be controlled, policy measures were directed at the movement of people. Smog alerts were issued and especially vulnerable people were advised to stay inside. Such measures were not received without controversy. As a campaigner stated: "I think [...] it is symptomatic [...] that we have reached the state where people are told not to stay outside. There is a school in Tower Hamlets where during the high pollution episodes the children were told not to go outside and play, you know, [...] it's absolutely unacceptable when that is what we have to do."

At the same time, the very invisible nature of the 'ghost' everyone was talking about started to haunt the public imagination. Who could be trusted in translating the socio-natural artefact of air into a tangible object of debate? The dependence on numbers and figures, or, more broadly, on scientific expertise, models and monitoring devices became contentious. Did the models give an adequate representation of what is in the air? An atmospheric scientist testified how "people claimed that the government deliberately put official monitoring stations in locations that weren't the most polluted". While another scientist called such opinions "absurd", firmly arguing that the science was untinged by politics. It did not make a difference: citizens wanted to see the state of the air with their own eyes. Armed with diffusion tubes, thousands of people took the mapping of bad air into their own hands.

New black spots came to the fore, triggering indignation about how the government, or even scientists, had been wrong or misleading. But did these maps, developed through citizen science initiatives, really bring people closer to the truth?

Other problems with the 'data' came up as well. The initial epidemiological studies were based on correlations between air pollution levels and average morbidity and mortality figures. However, these studies made abstractions from the fact that people do not stay in one place. To understand the problem of air pollution, it was necessary to investigate *how* and *where* the movements of people and bad air come together in disadvantageous ways. Spatiality was increasingly understood in a mobile, changing way. Experiments with personal monitoring devices showed how individuals were moving through varying layers of bad air. Coupled with GPS systems, a wide variety of people, including office workers, ambulance drivers, cycle couriers, nursery kids and primary school pupils were tracked 24 hours/day (Barratt 2013).

Interestingly, whereas citizens understood these projects as producing a more accurate scientific account of air pollution, atmospheric scientists tended to frame these experiments in a more political way:

We actually know by now where the air pollution problems are in London. We actually don't need any more detail and information about air quality, we need to improve it. But it's engaging, it's pretty, it's exciting, so it has its uses, but it must not distract us from the main thing that needs to be done.

The possibility to monitor one's personal exposure opened up new ways of engaging with the air for an increasingly varied range of actors. "Air quality is now so much in the public domain that people see it as a business opportunity rather than a public health challenge" an atmospheric scientist worried. He explained how "tech companies" were developing personal monitoring devices under the slogan "let's work together to improve air quality", while actually these devices do not do much good in this regard. According to him, these instruments merely present an illusion of accuracy. Yet, such warnings did not gain a foothold amongst the public. The devices sold well and helped people – at least imaginarily – to navigate their way through bad air. Avoiding high pollution hot spots was no longer an issue of mere 'mental' mapping, the behaviour of NO₂ could be artificially tracked, cartographically mapped. At the same time, attempting to navigate bad air, worried citizens got in trouble with the very mobility of air. "The whole thing moves around", one interviewee called out.

Mapping the air is crucial when one aims to make air pollution tangible. Still, the exercise is ultimately impossible and bound to fail. It is an attempt to create a 'here', an identifiable spatial entity that always remains contingent, as a map is and will always be an artefact that merely provides a momentary picture. It surely helps to mobilize citizens' energy, passion and indignation, but it is not without downsides. Citizens got overly concerned with the microscale, the spatially differentiated and partly artificial 'there'. The mailboxes of health charities and atmospheric scientists started to overflow with emails of anxious citizens. A health campaigner recalls how "a few schools contacted them asking whether they should buy a face mask for the whole group of children". Even though he was happy that the topic, his life project, was finally on the public agenda, an atmospheric scientist worried: "in the last few months [...] it just got crazy and it is so high up on the agenda that actually there is a danger of it becoming too alarmist, I think". As he worried: because of this alarmist appeal there is a risk that "actions are taken which are not necessarily scientifically robust ... if a lot of time, money and energy is spent on air quality sensors or paint that scrubs the pollution out of the air or bus stops that suck up pollution, that might distract from the really necessary steps about cleaning up effectively."

Furthermore, in this construction of bad air as spatially differentiated, the role of background pollution and of less spatially differentiated pollutants like PM is increasingly ignored. This happens despite the fact that the health effects of PM are scientifically much better known. As a health advocate admitted,

it makes sense to focus on NO₂ [...] but we are very aware that the research isn't as strong on NO₂ in terms of the health effects. The PM links are actually much worse for health and the research is just wider and there is more evidence.

Yet, it seems that rational, scientific arguments did not matter anymore. PM, O₃ and especially NO₂ had acquired a social life of their own. As a much more localizable substance, NO₂ had become the key pollutant in the public eye, and was increasingly made into a 'there', a localizable object of concern. In contrast, PM was perceived as 'everywhere', while O₃ – a rather unstable and reactive pollutant – was, probably partly because of its ambiguous nature, largely downplayed in public discourse.

It is no coincidence that the interest in acquiring a spatially differentiated picture of air pollution went hand in hand with a focus on NO₂. The link was made very explicit in a widely spread citizen-funded advertising campaign with big billboards carrying slogans like 'Location *location* lung disease', 'The neighbourhood's gone to the docs', 'These houses cost an arm, leg and a lung', stimulating future house occupants to first check the NO₂ levels before they decided to buy or rent a house (see figure 1).

As a result of this focus on NO₂, the key culprit was easily identified. NO₂ is foremost a by-product of diesel combustion, and what are diesel cars otherwise than highly specific, localizable and moving objects which can be relatively easily banned from the urban space? Whereas London's engaged citizens were first under the spell of an anonymous 'elsewhere', with a focus on diesel cars, this became a very localizable 'there'. In a rearticulation of the spatial imagination of the air, the enemy was no longer elusive but socially internalized: it was no longer an abstract chemical substance somewhere out there, escaping us.

In principle, agriculture, petrol cars, coal power stations, building works, wood burning etc could also have been targets for air pollution campaigns. This shows how politicization remains based on a contingent social construction, although the choice is never completely arbitrary. The point is that some social constructs facilitate processes of politicization and citizen mobilization more easily than others. Spatially locating identifiable sources which generate clear 'us/them' distinctions helps a great deal: from 'Doctors against diesel' to 'Mums for lungs', from 'Stop Killing Londoners' to 'Living streets', a number of groups took to the streets to demand the banning of diesel, even though targeting diesel cars hardly solves the entire problem, and paradoxically might be even counterproductive in terms of one of the initial goals of many campaigners, namely tackling climate change as well.

5. Concluding discussion

When confronted with counter-finalities, different attempts to indicate and depict the 'enemy' can be more or less successful. They can lead to or hinder processes of politicisation. To use Laclauian terminology, if the social is a spatial structure of relations, politicization is a specific intervention in this spatial structure. In this context, we argue, it is important to distinguish between an abstract conception of the enemy and a concrete dynamic of politicization. A discourse against CO₂ as an externalized and abstract enemy does not reconfigure the space of the social in terms which can lead to politicizing us/them distinctions. Mobilization occurs when a discourse establishes socially relevant spatial differentiations, giving 'a place' to counter-finality. It is a question of making the invisible visible: the anonymous 'elsewhere' should be turned into a 'here' or 'there'. The mobilizations around air pollution made visible that the urban environment is the sedimented result of contingent political choices, and that alternative possibilities exist.

As Laclau underlines, politicization means the establishment of discursive relations of equivalence. The crucial question is where to establish the equivalence, in other words, which us and them to construct, where to put the dividing line. With regards to questions relating to air this is difficult, as in principle

almost all human activities lead directly or indirectly to the emission of pollutants like CO₂ and PM. NO₂ is a bit of an exception here as approximately half of the NO₂ in the air is the direct result of combustion processes in diesel cars. Furthermore, its spatio-temporal characteristics imply that its presence can be mapped very visibly in a spatially differentiated way. Our contention is that the politicization process foregrounded NO₂ precisely because the latter can more easily be localized and represented in spatially differentiated ways.

In earlier work, we have shown the indeterminacy characterizing the politicization of climate change (Kenis and Lievens 2014). Deciding whether and where to draw dividing lines is not evident. As Laclau and Marchart show, the potential for social conflictuality is ubiquitous and involves contingent processes of construction. Still, the contingent choice of a particular enemy, a particular fault line, a particular us/them distinction is not arbitrary. Moreover, not every attempted construction of a fault line will be successful. Spatial dynamics and imaginations matter in this context. The indications found in Sartre's work certainly need further elaboration and refinement, but they were helpful in indicating ways to refine our post-foundational understanding of politicization.

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