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WHAT THEY SAY ABOUTUS

Air Pollution, Environmental Concerns and BAME Communities

By Paul Addae and Dr Shaun Danquah

A Literature Review

In Partnership With Impact on Urban Health

About the Authors

Paul Addae (BA, MA) is a graduate of The School of Oriental and African Studies. He has conducted research over the last 15 years in some of the most challenging and volatile environments. He has co-produced research with professors from Georgetown University, Exeter University and St Andrews University. He has also worked on EU projects around effective solutions to some social phenomena. Paul is also a fluent classical Arabic speaker and has translated many works into English.

Dr Shaun Danquah (BA, MA) is the founder and Director of Innovation at Centric. He has 15 years' experience in conducting research across hostile environments. This began in 2004 with his involvement in founding the Clapham Park Project, which was part of a £56 million regeneration scheme. He also worked on government programmes and on Los Angeles gang intervention initiatives, delivering workshops on best practice. His work led him to partner with Google, Ideo and YouTube. As a result of his work, he has successfully established networks across various underserved communities.

Paul and Shaun have worked jointly over the last 15 years on different research assignments in the US and UK.



Introduction

Research in London has shown that pollution disproportionally impacts black communities with Southwark, Lambeth and Hackney. Young children with no history of respiratory or cardiovascular conditions have developed lung irritation, respiratory infections and severe asthma in Lambeth and other parts of inner-city London due to high exposure to nitrogen oxide, in some cases causing death or hospitalisation. In 2014 Brixton Road had higher levels of pollution than Oxford Street, Euston Road and the City. In 2017 Lambeth was the second worst borough for air pollution. In 2020 Lambeth is still one of the worst London boroughs for air pollution, Lambeth Council introduced £20 fines were introduced for drivers who leave their cars idle, they noted some air pollution hotspots around Brixton.

However, despite this communities are often not at the table and are merely left with the sentiment that "they talk about us without us". There are links between COVID-19, race and the environment as air pollution in poor communities has caused high rates of respiratory illness and heart disease – the underlying conditions which will lead to worse outcomes for those who contract COVID-19 and shorter life expectancy generally.

This has brought the issue of environmental racism to the fore and compounded with COVID-19, discrimination, poor health conditions, inadequate housing conditions, poverty and wealth gaps an array of negative outcomes has exacerbated inequality. Where a person lives is reflective of a reality over which a person may have little control. Something apparently as banal as social distancing is impossible for someone who lives in a crowded flat or has to work in cramped conditions in a factory. This paper will look at air pollution and how it has affected the urban space and BAME communities and what can be recommended in order for the air pollution problem to gain more traction in communities which have disengaged.



Gaps in the Literature

There is a dearth of research on the interplay between urban studies on one hand and environmental on the other, and how this plays out within communities. The literature is also quite poor in regards to BAME communities and their exclusion and absence from the environmental agenda.

This would lead one to question why this has occurred. Therefore, there is a lack of an interdisciplinary approach which is needed to help fill in these significant gaps in the literature on how environmental concerns overlap with the urban context. The field is therefore quite underdeveloped and more insight is needed. This paper may contribute to shedding light on the field and areas for future enquiry. What is also significant is that communities also need to be empowered to solve their own problems with their environments via co-produced projects and equity-based models.

Hence, there are already localised insights within inner-city communities which need to be further liaised with due to the myriad of insights which are available in regards to the urban space, its decay and what can be done to mitigate against further local deterioration. These conurbations contain people who are affected and know how to manoeuvre and survive within the urban locale. Their voices need to be heard going forward and this is an area for further research.



Environmental Racism and the Impact on Distrust Across the Urban Locale

Minority communities have had an increased exposure to environmental pollutants reflecting legacies of environmental racism wherein systems have produced and perpetuated inequalities. Indifference, insufficient and inadequate testing of chemicals and materials, corporate loopholes, racism and housing discrimination all factor into this, especially when environmental health officers work alongside landlords to flout inspections and bypass necessary repairs (Preston, 2019).

The Grenfell tragedy is an example of this very problem with years of regulatory failure occurring prior which saw seven major fires and 11 deaths in high-rise flats, Ledwith (2020: 33) explains:

It would emerge later that well over 100 tower blocks and buildings around Britain had been clad in materials that, like those used at Grenfell, failed basic fire-safety tests. There is now an effort to peel the inflammable skin from these buildings, but it has not been quick work. Wherever such de-cladding gets under way, there usually remains a population of residents still living inside – closing their eyes, just imaging the worst.

That the Grenfell passed all local authority Building Control inspections and that ambiguous wording in regulations as per Approved Document B of the UK's Building Regulation 2010 (see Hodkinson, 2018: 13), is testimony to the failures which proliferate in the urban locales where BAME communities reside. Kodur and Naser (2020: 7-10) and Boughton (2018: 254) have also discussed the fire safety hazards and poor regulation, while privileging private profit and commercial corporate interests, was all evident with the Grenfell Tower disaster.

It is such negligence which can feed into urban community scepticism as theories circulate which highlight: poor emergency response times, inflammable cladding, inadequate fire alarms, no sprinkler system, ladders which were too short, poor evacuation plan, gas piping in stairwell, and not listening to prior complaints from residents. Not only does this feed into urban community scepticism and distrust but also lends itself, as had been noted by Preston (2019: 34), conspiracy theories about an elite and corporate plot to be rid of minority communities from the urban space and public view for the benefit of potential private purchasers.

This speaks to a wider issue which is that some people may not want to speak out against the system, be it on environmental issues or health hazards in the locale, as they fear deportation.

As a result, they may not want to explain to a council which has provided them with shelter that there are problems. Even though they are areas which are entrenched in urban decay. Some groups feel they may not have the social right or a stake to speak. This may explain why there is silence to speak out on environmental issues related to air pollution within certain communities. Some of these groups within the inner-city have a lack of equity to speak up and complain, as they do not want to be seen as ungrateful immigrants.

COVID-19 and Air Pollution

In the UK, crowded housing conditions and risky working conditions have been suggested as reasons for the disparities in the COVID-19 death toll. Only 2% of white Britons live in crowded conditions while 30% of Bangladeshis, 16% of Pakistanis and 15% of black Africans reside in crowded conditions in the UK (Washington, 2020). BAME communities are more likely to live in deprived areas which have higher rates of air pollution.

Soltan et al. (2020) in a study of 400 COVID-19 patients who had been admitted to a Birmingham hospital found that patients from BAME backgrounds were twice as likely as white patients to live in areas of environmental and housing deprivation. Not only that, but Soltan et al. also revealed that people from these areas were also twice as likely to arrive at hospital with more severe COVID-19 symptoms and to be admitted by intensive care units. Indeed, another study found compelling evidence between dirty air and COVID-19 infection. This study found a "strongly suggestive" statistical link between those living in the bottom 20% of areas which have barriers to housing and services, being from an ethnic minority and COVID-19 outcomes.

Miyashita et al. (2020) also suggest that increased exposure to air pollution increases the number of ACE2 receptors that the coronavirus hijacks to enter the body. They concluded that there is biological plausibility for epidemiological studies reporting an association between either PM10 or active smoking and COVID-19 disease. Tung et al. (2020), in a study commissioned by the Ministry of Science and Technology of Taiwan, concurred with the suggestion that increased exposure to particulate matter (PM) increases ACE2 expression in the lungs which in turn facilitates SARS-CoV-2 viral adhesion.



Two regions in northern Italy, Lombardi and Emilia Romagna, which are heavily polluted due to the high number of factories, heavy traffic and also surrounded by mountains which can prevent air cycling, had higher COVID-19 mortality rates compared to other regions of Italy (Conticini et al., 2020). Martelletti and Martelletti (2020) also found that northern Italy, polluted profoundly with PM10 and PM2.5, was severely affected by COVID-19. Fattorini and Regoli (2020) asserted that there is a significant correlation between chronic exposure to PM10 and PM2.5 and COVID-19 cases in northern Italy. Zoran et al. (2020) found an association of PM10 and PM2.5 with confirmed COVID-19 cases. Bashir et al. (2020) looked at California and found a significant association of PM10 and PM2.5 with COVID-19 mortality.

PM10 and PM2.5 were found to be associated with COVID-19 incidence in Xiaogan in China (Li et al., 2020). While Wu et al. (2020) conducted a cross-sectional study of 98% of the American population and suggested that increased PM2.5 exposure results in a 10% increase in COVID-19 mortality. While Bedi et al. (2020) have looked at how lockdown measures in India in the four cities of Delhi, Mumbai, Kolkata and Chennai led to a reduction in No2, PM10 and PM2.5.

A study earlier this year in April found that even slighter small increases in fine particulate matter, PM2.5, corresponds to an 8% increase in COVID-19 deaths. People with higher exposure to air pollutants over a 15-20 year period had a higher risk of death from COVID-19 in 3080 US counties.

Travaglio et al. (2020: 11) in a preliminary study looked at the link between air pollution and COVID-19 in England and found that:

The spatial pattern of COVID-19 deaths matched the geographical distribution of COVID19-related cases, with the largest numbers of COVID-19 deaths occurring in London and in the Midlands (Figure 2). According to previous studies, those two areas present the highest annual average concentration (µg/m3) of nitrogen oxides.

Travaglio et al. also note that a potential source of key air pollutants is petroleum combustion from non-road commercial machinery, which emerged as an important predictor of nitrogen dioxide, nitrogen oxide and ozone concentrations. Importantly, they suggested that indoor air pollution aggravated respiratory disorders and that lockdown measures led to a considerable deterioration of indoor air quality following the first COVID-19 wave. Hence, according to Travaglio et al., there is a correlation between regional levels of air pollutants and the number of COVID-19 deaths.

However, Travaglio et al.'s findings have been problematised by many researchers as: it was not peer-reviewed; they did not find any statistically significant correlations; it was deemed as too focused on London; the chemical effects of pollution may not be causal to COVID-19, and so the study does not prove cause and effect; larger cities with larger population densities may seem as being worse but this is due to higher populations of people from around the world, so the virus had more time to spread and also due to cities with higher populations by their very nature will have higher numbers of deaths; so the study did not directly model death rates or case fatalities.

Hence, Travaglio et al.'s study has been greeted with strong scepticism and as not being entirely conclusive. In saying that, the impact of air pollution on respiratory health generally cannot be denied. A Public Health England report in June 2020 was also criticised for not addressing at all the role of air pollution in making viral infection more likely with short-term exposure and weakening lungs and hearts in the long-term. Nevertheless, based on findings from China, Italy, California and some research from the UK, there may be evidence that heavily polluted areas are more susceptible to COVID-19. Long-term air quality data may correlate to COVID-19 risk and chronic atmospheric pollution may favour the spread and transmission of the virus.

Air Pollution and Exposure in Minority Communities

Air pollution has been a pressing issue over the last few decades however only in the last few years has the impact of air pollution on BAME communities been addressed. Although even over 25 years ago a few researchers were already observing some causes for concern in how environmental damage and dangerously toxic substances were disproportionately affecting minority communities within urban locales. Bullard (1993: 320) noted that:

Race is a powerful predictor of many environmental hazards, including the distribution of air pollution, the location of municipal solid waste facilities, the location of abandoned toxic waste sites, toxic fish consumption, and lead poisoning in children.

This bleak reflection at the time indicates that race and air pollution have long been an issue, and even though the current situation may not be as bleak today as articulated by Bullard in 1993 there are still some gaping disparities which abound across the urban locales of the West.



One of the first studies to look to tackle this matter was by Mohai and Bryant (1991) and they stated that African-Americans in Detroit were four times more likely than White Americans to live within a mile of a hazardous waste facility, and hence race is a stronger predictor of such proximity than income. This may serve to explain, as has been argued by other researchers, that even African-American middle-class people are at more exposure than low-income white communities.

Gwynn and Thurston (2001) which looked at how ambient air pollution from heavy traffic was impacting minorities disproportionately in New York City and leading to higher hospital admission for respiratory illnesses.

Su et al. (2011) uncovered that ambient concentrations of pollutants nitrogen dioxide, fine particulate (PM2.5) and ozone at public parks in areas of Los Angeles impacted neighbourhoods where ethnic minorities reside. There was a particular concern that although the public parks were low in terms of NO2 and PM2.5 they had high O3 concentrations. The neighbourhood next to the parks however had high exposure to NO2 and PM2.5. Children aged 6-15 engaged in exercise in and around public parks had higher inhaled doses of nitrogen dioxide. In this way, there is evidence of socio-economic and ethnic disparities when it comes to air pollution exposure and inhalation, suggesting exposure inequality.

Gray et al. (2013) similarly found out that both minority and low socioeconomic status communities were associated with higher levels of fine particulate (PM2.5) in North Carolina. In another study, again based in North Carolina, Gray et al. (2014) found that these higher levels resulted in adverse birth outcomes for women and that air pollution may affect birth outcomes through multiple pathways including oxidative stress, blood flow, placental formation and function and inflammatory responses. Socially disadvantaged populations were found to be at greater risk.

Jones et al. (2014) studied 5921 white, black, Hispanic and Chinese adults across 6 US cities between 2000 and 2002. They found that Hispanic communities were over-represented in exposure to high PM2.5 and nitrogen oxide concentrations.

White communities however were underrepresented in exposure and thus living in majority-white neighbourhoods was associated with lower air pollution exposure.

Ard (2015) conducted a spatial and temporary examination of environmental inequality in the US from 1995-2004 and discovered trends in exposure to industrial air toxins for different racial and socio-economic groups. Ard's longitudinal study found out, interestingly, as has also been acknowledged by Harriet Washington (2020) author of Medical Apartheid, that middle-class African-Americans are exposed to more toxins than low-income white Americans. Washington (2020) has argued that even African-American middle-classes are exposed to higher levels of industrial chemicals, air pollution, poisonous heavy metals and pathogens, even more so than poor white communities. Gould and Lewis (2017: 31) note that racial and class discrimination in housing options make it less possible for people of colour, regardless of class, to move to areas which have better air quality and environmental amenities. Ard also suggested that while levels of industrial toxins decreased over the period, as is the amount of toxins, the toxicity of the toxins did not appear to decrease.

In 2015 Fecht et al. also found big differences in air pollution across communities in England and that areas with high rates of deprivation or communities of ethnic minorities the worst affected. They concluded that air pollution inequalities are largely an urban problem and that the situation in both England and Holland ran parallel.

Hispanic communities have been shown to be impacted the most in some studies (Jones et al., 2014; Tessum et al., 2019), while Cooper et al. (2019) in research conducted in Australia also found that vulnerable communities may also be exposed to higher levels of air pollution.

Tessum et al. (2019) describe this as a 'pollution burden' in which minorities bear the most due to this increased exposure to pollutants which they inhale. While the "pollution advantage" is the preserve of white communities. They also suggested that between 2003 and 2015 pollution decreased for African-American communities from 73% to 56%. While for Hispanic communities it increased in this period from 60% to 63%.

Pearson et al. (2018) looked at how a broad range of the American public totally underestimated the environmental concerns of minority and low-income Americans. Interestingly, their respondents associated the term 'environmentalist' with 'whiteness', a middle-class background and being well-educated. They refer to this as a 'belief paradox' as groups that are the most vulnerable to environmental impacts and whom surveys show have high levels of concern about the environment, are thought to be the least concerned about their environment. This belief paradox can sometimes serve to side-line these communities when it comes to environmental advocacy and policy making. Moreover, this also has implications for collective action if environmentalists are seen as non-inclusive.

Earlier this year the American Lung Foundation in their State of the Air report (2020) noted that African-American communities suffered greater risk of premature death from particle pollution than those who lived in communities which are predominantly white. They also noted that decades of residential segregation have led to communities living in areas where there is more exposure to air pollutants.



Minorities and Environmental Issues and Why BAME Communities Are Not Involved

Disapproval and displeasure among local inner-city residents about 'the dirty stairwell' serves as a metaphor which helps to demonstrate that many people are concerned about their environment, space, locale and pollution. The 'dirty stairwell' symbolises the current state of the locality: used syringes, cans of empty beer, rizla papers and nappies clog up the stairwell, and is symbolic of urban decay in the locale symptomatic of the current environment. Akkerman (2016: 177) relays: As disintegrating and hostile, dishevelled and desolate, the place of urban decay in the contemporary metropolis has been habitually ignored or – alternatively – marked for elimination. Yet, more than any other facet of contemporary city-form, urban decay – a manifestation of the gap between an urban blueprint of the past and its aftermath lingering into a present – expresses urban time as a flowing continuum, both in its social and physical attributes.

Brailsford et al. (2019: 74) note that low-income housing is characterised by dilapidation which exposes residents to toxins, infections and illness. In large urban areas BAME communities are becoming the majority in overcrowded and downtrodden inner cities.

Unemployment rises, discrimination thrives, housing is limited and education poor in what serves as a viciously meandering cycle which keeps generation after generation in slums and ghettos.

Profits are primary for many local governments and this shapes their only notion of 'development'.

However, this recognition does not always translate into prioritising environmental and climate change activism for BAME peoples as daily living is seen as being primary. Minorities produce the less pollution, but pollution negatively impacts them the most (Tessum et al, 2019). However, environmental groups who may bring environmental issues to the fore are often seen as external movements sitting outside of the general urban locale and their concerns. This has caused tension and conflict between environmental groups and their concerns on one hand and urban communities on the other. Further to this, as environmental movements are principally based outside the urban locale they have a superficial understanding of the core socio-economic, and environmental, issues which impact these communities.

The residents of these locales are focused on daily survival and this reality is not understood by environmental organisations from outside of the communities in which they parachute into for protests, demonstrations, marches and 'die-ins'. The daily struggle for survival, exacerbated by the overdevelopment and rapid growth of the urban space, means that people in the inner-cities are primarily focused on surviving and hence food, clothing, housing and employment are the basic necessities which need to be addressed. Environmental concerns are often viewed as luxurious side issues which s/he cannot afford to court at this moment in time. Ahmed (2019) states:

The threat of extinction needs to be brought 'down to earth'. In this way, the platform that XR is offering becomes meaningful to people of colour and working people, who are struggling right now in ways that white middle classes worried about extinction tomorrow can barely imagine.

This may serve to account for part of the reason as to why the climate change, ecology and environmental movement has not really taken off as much as other issues around police brutality. As in the immediate term police brutality has led to direct loss of life whereas climate and environmental issues are not seen as an immediate threat to the lives of those in the inner-city and urban locale.

Environmentalists have neither traditionally tackled this issue nor environmental health hazards affecting everyday people of these communities. In this way, ecological and environmental causes which speak of a 'climate catastrophe' are not seen as immediately pertinent to the urban locale.

As we shall see, the failure of large environmental groups and movements to forge alliances with the residents of urban locales and the inner-city areas has been due to a failure of these movements to understand both their own positionality and the circumstances of those who reside in urban areas. Conversely, the urban locale has also become too cocooned in its concrete surroundings oblivious of the benefits in more open spaces, larger parks, increased recreational areas for children, cleaner air etc. A merger and convergence between the urban and environmental has to be forged.

However, due to environmental racism BAME communities often do not get their views or concerns taken seriously. Sadly, it may take a tragedy or disaster before concerns are taken on board seriously. The Grenfell disaster was emblematic of socio-politico-economic racial factors which impact the disproportionate distribution of hazardous materials and environmental risks in BAME areas.

Hodkinson (2019) in his book Safe as Houses has discussed that Grenfell residents repeatedly raised concerns about fire safety and the standards of works by the main private contractor Rydon Maintenance Ltd however their concerns were ignored by them and also the local authority at the time and its management organisation Kensington and Chelsea Tenant Management Organisation (KCTMO). Several residents were even threatened with legal action if they were to make their claims and concerns public. Brailsford et al. (2019: 74) highlight that racism and discrimination restrict socioeconomic and residential opportunities for minorities.

The Black Panthers in the 1970s came together with communities to start environmental projects, in what were examples of collaboration and proto co-production (Williams, 2006: 184). They formed a partnership with the Trust for Public Land to create a 'gardens of the ghetto' project to address environmental racism (Brown, 2007: ix). Nearly fifty years on however, there have been concerns however that urban communities have no stake or interest in environmental issues.

This is also compounded by the fact that the main environmental movements concerned with climate change in the UK have a number of areas of concern, as they are regarded as not very diverse, completely out of touch with how pollution affects the poorest communities in the UK and are largely dominated by white upper and middle-class collectives. The complete absence of both BAME and White working-class voices in these movements has been quite conspicuous.

This has been discussed in the work of Wall (1999, 2013), Taylor (2014), Ahmed (2019), Bell (2019) and Berglund and Schmidt in their recent research in the Extinction Rebellion movement (2020).

They have noted how climate change movements have neither considered the impact of their actions on poor and BAME communities nor sought to seriously engage with these communities who largely live in the most polluted parts of the country. Indeed, one of the reasons why the climate movements are seen as alienating BAME peoples is due to them being regarded as more concerned with 'fluffy animals', scenery and new-age bohemian hippy notions rather than the real and actual environmental plight and climate catastrophes suffered by poorer peoples, who are not white middle-class.

However, it is worth noting that in Brixton in the early 1990s there was more opportunity for there to be a merger of environmental issues locally. Yet black Brixton locals viewed the activities of external activists with a fair degree of suspicion and articles published in the magazine Race Today, a Brixton-based cooperative run by ethnic minorities from the 1960s through the 1980s, emphasise this mistrust (Dancygier, 2010: 68). Wise and Wise (2015) noted that Claire Doyle who worked for the Trotskyist Militant tendency was often heckled by the black youth of Brixton and Toxteth when she tried to muscle in on local community activity and promote the formation of the Labour Committee. She was accused of trying to gain political capital of the disturbances. Yet Brixton in the early 1990s, with its accommodation of subaltern counter-cultural spheres, was also home to a chapter of the Earth First! Movement. This was a Green campaign group which was founded by Shane Collins to promote environmental awareness and radical protest. He also had a role as a network figure in early 90s Brixton involved in squatting and providing office space for other protest movements at various locations in Brixton such as the Cooltan Arts Centre.

Cooltan was the name of a former disused suntan lotion factory which Collins had opened in June 1991 as a squatted centre for green activity and was utilised by the 'Freedom Network' as a protest movement hub in Brixton (Wall, 1999:108). It became an alternative countercultural centre and ran gigs which brought the protest movement together. A café was set up with jazz bands playing there regularly along with other music events, raves and acid house parties contributing to the emerging ecstasy and acid house culture of the 1990s.

The Cooltan Collective provided accommodation for campaign groups such as Reclaim the Streets, Earth First!, Freedom Network, the Green Party, London Friends, London Green Party and Families of Travellers. The campaign against the Criminal Justice Bill of the early 1990s brought together green environmental activists and urban left activists (North, 2006: 61). In February 1992 the squatters were evicted and the building was destroyed, while the land was not used for ten years. The 'Cooltan Collective' then moved to the offices above Brixton Cycles and then in September 1992 moved into the old Unemployment Benefit Office on Coldharbour Lane. They were evicted from here in September 1995.

More recently, Transition Town Brixton aims to 'support community-led responses to peak oil and climate change, building resilience and happiness'. They emphasise re-localising and building local community resilience and their projects include the local currency, the Brixton Pound, which is the first local currency in an urban area, and also multiple projects aimed at growing food locally. In 2010 Brixton was selected as one of the Mayor of London's 'Low Carbon Zones' (see Bulkeley et al., 2015: 199-29). Lambeth Council was given £330,000 to this end with the aim of reducing carbon emissions by 20% by 2012. It did not apply to all of Brixton but from Rushcroft Road to Max Roach Park and the Loughborough estates.

In 2017 the Mayor of London established a Low Emission Bus Zone on Brixton Road, this followed a campaign led by Cllr Jennifer Braithwaite for clean buses throughout the borough starting with the most congested and polluted roads between Brixton and Streatham.

More recently, Lambeth Council, via Lambeth Living Streets, have introduced Low Traffic Neighbourhood (LTN) schemes as part of the Brixton Liveable Neighbourhood initiative however this also is not throughout the whole of Lambeth. A group of residents recently have asked the council to broaden the schemes to the whole of Lambeth. A survey by residents demonstrated an increase in the number of people using cycles since the Railton LTN was introduced. While another survey showed 75% of residents support the Railton scheme. That stops through traffic along residential streets between Brixton and Herne Hill.

However, these surveys have been criticised for only surveying 366 residents, not to mention that in the area has been a raging debate over the LTNs as some residents oppose the LTNs arguing that they: have been implemented without consultation; are poorly planned; are biased in favour of cyclists; push traffic onto already congested main roads and A roads which affects poorer residents; do not grant clean air for the majority only for a few residents; cause distress to the vulnerable and elderly; 5 minute trips to the petrol station by car now take 25 minutes and some even suggest that local animosity has increased as a result of the LTN.

Save Oval Streets is a campaign group which began in 2017 made up of residents from the Oval Triangle and campaigning for action on traffic in Oval. They support the Oval Triangle LTN. Whereas on the other hand, the One Oval campaign group are totally opposed to the LTN. One Oval is part of the wider One Lambeth group which is also anti-LTNs. Mums for Lungs is a group of mothers in South London who are concerned about toxic levels of air pollution in the area.

Founded in 2017 the organisation has two other branches in East Sheen and Walthamstow. 'Lambeth for a Cool Planet' began in 2015 but has not been active over the past 2 years.

The environmental direct-action activism of the early 1990s which found a comfortable home in Brixton in the early 1990s has long gone, for a variety of reasons. Firstly, local young people have not been able to connect with the general environmental and ecological cause. This is quite significant for a locale such as Brixton which is one of the most polluted areas of the UK (Urban, 2019).

How can groups concerned with the global ecology be so distant from the local urban ecology? Campaign groups in the area are noted for a distinct lack of working-class BAME youth and parents from more marginalised parts of South London. Secondly, although more local people of colour are now playing more a role in environmental causes, the larger environmentalist movements are dominated by white middle-class women and men from outside of the urban space, or who have arrived to that space. Thirdly, the direct-action environmental activism has moved from the urban space to suburban areas. Yet in doing so, it lost any connection with the activism which was closer to a range of other working-class causes. Berglund and Schmidt (2020: 36) elaborate on this further and note:

The tactics of Extinction Rebellion are designed for middle-class, white Britain. The institutional racism of the criminal justice system is well-documented with Black and ethnic minority Britons being more likely to be stopped and searched, arrested, imprisoned, killed by police and die in custody. To have a tactic that directly puts activists in contact with that criminal justice system is therefore exclusionary by design.

This supports some sentiments in the communities that there would be no way whatsoever that young black men for instance from inner-city areas would be able to simply hold up traffic for hours on end while staging a protest, as the police would move them on in no time.

Would such disruption be handled with the kid gloves approach adopted for climate protesters? To further demonstrate the exclusionary approach of Extinction Rebellion they published a 'prison guide', since taken down, which asserted to its members facing the prospect of arrest that "most prison officers are black and do not want to give you a hard time". This was factually untrue and erroneous. While other Extinction Rebellion spokespeople have argued that there is a 'net environmental footprint' due to migrants in the UK and so harsher immigration controls are required. Hereby tapping into the 'mass migration' rhetoric currently in vogue with many populist movements in Europe. Berglund and Schmidt continue:

Since activists are expected to pay their own fines and court fees, there is also a strong class element to the tactics of arrests. In short, XR's tactic presume a level of privilege.

That in itself is not necessarily a bad thing. There is no shortage in human history of progressive movements for change being led by elements of the middle class. Where it has sometimes become problematic is where the whiteness of the movement has translated into reinforcing racism in a number of ways.

This was observed when many of the Extinction Rebellion activists seemed to apparently intend arrest in a manner some would regard as sanctimonious. However, this is not a privilege which can be merely 'wished for' by BAME people from the urban locale, whose mere presence will most likely result in immediate arrest and harsher police tactics. Indeed, Extinction Rebellion further demonstrated both their naïve faith in the police and their problematic relationship with BAME communities when in 2019 they tweeted that the police should not prosecute their non-violent activists but should instead 'focus on knife crime'. This was regarded as merely feeding into a racist and discriminatory narrative and in a way encouraging police to rather focus on BAME crime within the urban locale.

While earlier in 2020 the movement used banners which read 'Metropolitan Police, Extinction Rebellion, both working for a safer London'. While in Brixton, an Extinction Rebellion activist left a 'thank you' card and flowers for the police at the Brixton police station. In any case, this assumed privileged status may soon evaporate as British officials currently consider proscribing the movement Extinction Rebellion as a terrorist organisation. Berglund and Schmidt elaborate:

First, the chants of 'we love the police' naturally antagonise people whose experiences with the police as an institution have been violent and oppressive because of racism. Second, a story about white activists reporting black activists to police for suspected pickpocketing during the April 2019 action reinforced the impression of police as allies and Black people as a dangerous and criminal Other. Third, the statement saying that police should address knife crime instead of XR ignored the racism involved in policing knife crime in London. If XR, as is likely, remain largely white, such acts and discourses which reinforce racism may continue.

In the last few months Extinction Rebellion have announced that they have been late to recognise white supremacy, diversity and racism. This turn was motivated by complaints from its own members coupled with global racial tensions. The movement however has an intersectional problem in that it fails to address both race and class factors when it comes to the environment and climate. Moreover, the movement does not adequately collaborate with communities, this was also seen in Canada where the movement was accused by members of the Scia'new First Nation of entering their lands without permission in order to protest against a gas pipeline.

Other organisations such as Wretched of the Earth, No Tar Sands, Platform London, Stop Killing Londoners, Climate Camp, Climate Reclaim, and Bank Track have slightly more people from BAME communities in their movements. They emphasise the role of large corporations, banks and financial institutions in the climate crisis and their work includes joint work with the local communities in which they operate. However, although these organisations claim that community consultation is mainstay of their work, this is only as in so far as it may relate to their activities in the Global South. In the UK however, these groups are still marked by a lack of significant engagement with local communities with bad air quality and a complete absence of male BAME youth.

Marginalised voices from the inner cities for some reason have been rather silent on the environmental issues within the urban space. Whereas for years urban locales have been home to a variety of protests movements, activism and community issues, environmental issues have not been as popular. Which may be due to the 'belief paradox' that environmental concerns are the preserve of the gentrified white middle class.

While many BAME climate justice campaigners, such as those from the Tar Sands Network, resent the PR of organisations such as Extinction Rebellion and deem them as overriding their work and not given them due credit. Moreover, they regard the publicity stunts employed by white middle-class protestors as being more performative and theatrical. Additionally, Extinction Rebellion is regarded as exclusionary as they neither give attention to climate issues in poorer UK neighbourhoods nor in poorer countries.

Hence, the performative protests by such predominantly white middle-class movements which paint prison as a mere new-age bohemian retreat simply does not resonate among populations which have histories of civil disobedience. Community civil activism regarded as key for many community-based activists as responses to actual and present environmental realities affecting millions of people around the world as opposed to theoretical future climate catastrophes.

In this way, some contemporary climate change movements diverge from a broader comprehensive ecological framework which emphasises the interconnection between community and environmental justice.

Suzanne Dhaliwal, from No Tar Sands UK, has noted that the new climate change movements merely 'dumb-down' climate concerns and air pollution. While some black commentators such as Benjamin Zephaniah suggest that these climate movements merely protest in ways which are culturally relevant to them and if they started adopting cultural symbols associated with BAME peoples in their protests then they would be accused of cultural appropriation. As a result, BAME groups should get involved in environmental causes without waiting for an invite, and if necessary go with their own cultural symbols (Gayle, 2019).

Class and Environmental Issues in the Urban Locale and Inner Cities

Socio-economic conditions play an important role as was revealed in a study conducted in Czechoslovakia by Branis and Linhartova (2012) wherein they found that those living in areas of high unemployment and educational attainment lived in areas with higher concentrations levels of combustion-related air pollutants. Due to this, they suggest that there is a strong case for there being 'environmental inequality', in a way which is not merely about race, but also class.

Likewise, Bell (2019: 2) in her book Working-Class Environmentalism argues strongly that in the case of the Grenfell tragedy, class was a key factor as the residents did not have their concerns listened to whatsoever despite complaining years previously in regards to their fears. The casual approach to their concerns, Bell opines, was due to the Grenfell residents not wielding socio-economic power. As a result, their lives were devalued and their concerns rubbished.

The horrific sight of poor people in a tower block being burnt alive is testimony to the role of social class in environmental concerns. Bell states: In the UK and around the world, working-class people are killed and injured through living and working in toxic and dangerous environments everyday, largely invisibly, out of public sight and awareness. When they voice their concerns and complaints, they are ignored and sometimes insulted.

Even though air pollution and environmental disasters impact working-class people disproportionately, there has been a concern that environmental issues have been the preserve of the middle-classes and that even when it comes to environmental issues within the urban space this is often led by those from middle-classes who are largely part of the newer gentrified populations. Many of the traditional working class became upwardly mobile and vacated the inner-city, as 'Right to buy' in the 1980s under Thatcher meant people left for pastures new.

Those who did remain had changed their mentalities which led people to focus on paying off mortgages rather than getting into trouble at work with trade unions or issues which could possibly for them result in loss of a job. Due to this concern, many working-class populations, especially the white working-class, became apprehensive of participation in activism, be it environmental or otherwise. As a result of these dynamics, topped off by the hyper-gentrification encouraged under New Labour, a middle-class cohort came to dominate the urban space and the reins of the issues, and hence the narrative.

Along with economic capital (wealth and income), there is also cultural capital (education credentials, knowledge and skills) which the middle-class possess, and this has been seen in schools in the urban space. Middle-class residents were able to articulate concerns coherently and with sophistication, be vocal and articulate the narrative. This then translates over into collective action to address concerns, environmental ones in particular, this has been noted by Russell et al. (2017: 216-17) in evoking Bourdieu (1986) and Hall (1999) and their writings on social capital (social connections and valuable friendships).

Middle-class residents can utilise their own economic and cultural capital in order to underpin social capital for themselves and their locales so as to establish locales according to middle-class cultural preferences. Hall argued that this social capital is largely the preserve of the middle-classes and is not distributed evenly among the British population. Russell et al. refer to a study of an area in London wherein the middle-class residents were able to evoke of range of social skills such as case preparation, knowledge and social confidence which were the "elements of cultural capital which were important in relation to environmental change". Russell et al. also note (2017: 217):

The middle-class residents of Butler and Robson's study utilised social capital to ensure cultural capital for their children, to protect the value of their property investment and to protect their efforts to gentrify the three areas of London studied. In studies of participation it has also been found that public forums are often dominated by established middle-class people, those who possess considerable cultural and economic capital.

They continue:

There is a clear tendency for those with cultural and economic capital to utilise this capital in ensuring their voice is heard in formal governance processes and when linking with local government and other agencies.

Bell (2019: 146) evokes this when she mentions that middle-class activists can enlist the support of lawyers, lobbyists and experts to defend their neighbourhoods and attempts for environmental improvements. However, Burke and Jeffries (2016: 5) have discussed how urban reinvention and newly gentrified communities who benefit from former slum areas benefit the most from 'regeneration'. While those who have played a role in neighbourhood activism and local community reform against exclusionary measures over the decades have been erased from this new spirit of gentrified urbanism.

A new hyper-gentrified urbanism which wallows in sustainable development, citizen involvement, environmental protection and transportation innovation. Such regeneration is not fully equitable especially for BAME communities. Burke and Jeffries (2016: 4) opine in regards to Portland, Oregon in the US:

Behind the façade of green bicycling, coffee-sipping, and white middle-class urbanites is a bitterly tragic and ironic history of the political, social, economic, and spatial exclusion of Portland's black community.

Gould and Lewis (2017: 2) highlight, when discussing the 'greening' initiatives of New York that although they:

...improve the environmental quality of neighbourhoods and turn economically "wasted" spaces into productive spaces, they do not do so equitable. They contribute to environmental sustainability, and economic sustainability, but not social sustainability.

Simon (2016: 80) supports this in his essay on Green Cities, stating:

Moreover, the entire vision and orientation of these utopian imaginaries are towards elite and middle-class careers, workspaces and lifestyles, putting them beyond the realms of widespread replicability and irrelevant to the needs, affordability and priorities of the urban poor, who form the majority of urban dwellers in most rapidly growing urban contexts.

Hence, it may the case that local authority officials, as Haase notes (2017:232) ...have so far a bias with regards to the views and perceptions of middle-class inhabitants and the needs and wants of specific (environment-minded) lifestyle groups; this largely by-passes the views of various precarious population groups including the unemployed, poor families, alternative subcultures, migrants, other minorities. The eco-gentrification debate, again, considers this fact, stating that ecological projects or solutions often designated for a bourgeois aesthetic and that urban gardening and farms picture a niche or "glossy representations of sustainability".

By and large the views of low-income groups or people not taking part in participatory events tend to be less considered when discussing on green developments...

Gould and Lewis (2017: 71) refer to the research of Lee (2003) who suggests that the hyper-gentrification which has occurred in London, since the time of New Labour, has been the focus of huge investment by super-rich financiers fed from the fortunes of the financial services sector connected to national and local government policy. This has been seen in parts of South London, in Brixton and Peckham in particular. Class and racial inequalities can increase and reproduce environmental injustice exacerbated when, as Gould and Lewis (2017: 36) highlight: "the creation or restoration of an environmental good – greening – will tend to focus increase racial and class inequality and housing segregation..." It again demonstrates that concerns for a green ecology are not so concerned about the local urban ecology.

Gentrification has therefore led to a middle-class control of acceptable expression and a dictation as to how this should play out in the urban locale and how to articulate expression, with an assumption that black and working-class forms of expression are 'aggressive', 'coarse', 'confrontational' and unsophisticated. Hence, due to such alienation, a working-class person who may choose to participate in environmental issues may be reframed as being middle-class (Bell, 2019: 31).

In October 2019, commuters at Canning Town heckled and removed an Extinction Rebellion protestor, in what could be construed as a modern class struggle in an unlikely, and surprising, manifestation. Locales such as Canning Town are home to people in low-paid jobs, on zero-hour contracts and reside in poor housing. It has a high percentage of working-class residents who had their commutes to work disrupted significantly by XR protestors who are largely middle-class, and in cases even upper-middle class. These communities are the less likely to produce air pollution but be more exposed to it.

This also came to the fore when the vegan wing of Extinction Rebellion, Animal Rebellion, decided to occupy Smithfield Market, where many working-class people earn a living. Many working-class people therefore feel alienated from the dominant middle-class cohort found within the climate change movement such as Extinction Rebellion for instance.

Conclusion

There are multifaceted issues which impact health and wellbeing in the inner-city, and air pollution is evident as a factor in the poor health outcomes in these areas, as Broad (2016: 46) highlights:

A host of intersecting concerns – related to poverty, the built environment, environmental injustice, education, racial bias in the criminal justice system, and a lack of economic opportunity, among other factors, intersect with food issues to influence health and well-being.

Reed (2019) in The Art of Protest argues that 'ecocriticism' had little to say when it came to issues or race and class when it came to environmental issues. While the environmental justice movement also had little to say on socio-economic issues and was largely occupied with science, ecology, environmental law and public policy. Contemporary environmental justice ecocriticism therefore argues that environmentalists need to address cultural contexts wherein environmental racism and exploitation of the working-class. There have also been serious health consequences due to the deregulation of both environmental and safety protections especially for BAME communities who already face higher mortality rates in comparison with their white counterparts.

Although this paper has found a myriad of areas for further enquiry, it does not set out to have all the answers. However, what has been identified is a gap between environmental issues and the urban context in which many BAME communities reside. It has merely scratched the surface but has alluded to the significant need for further research built on the issues raised. It is imperative that to address this intellectual gap that they consider three elements: From the literature review there is an absence around accessibility, positionality and credibility.

The Cooltan Collective of the 1990s garnered positionality as environmental pressure groups were embedded within the urban locale, while the Black Panthers in the 1970s in the US utilised credibility and accessibility for their 'survival' and local environmental plans.

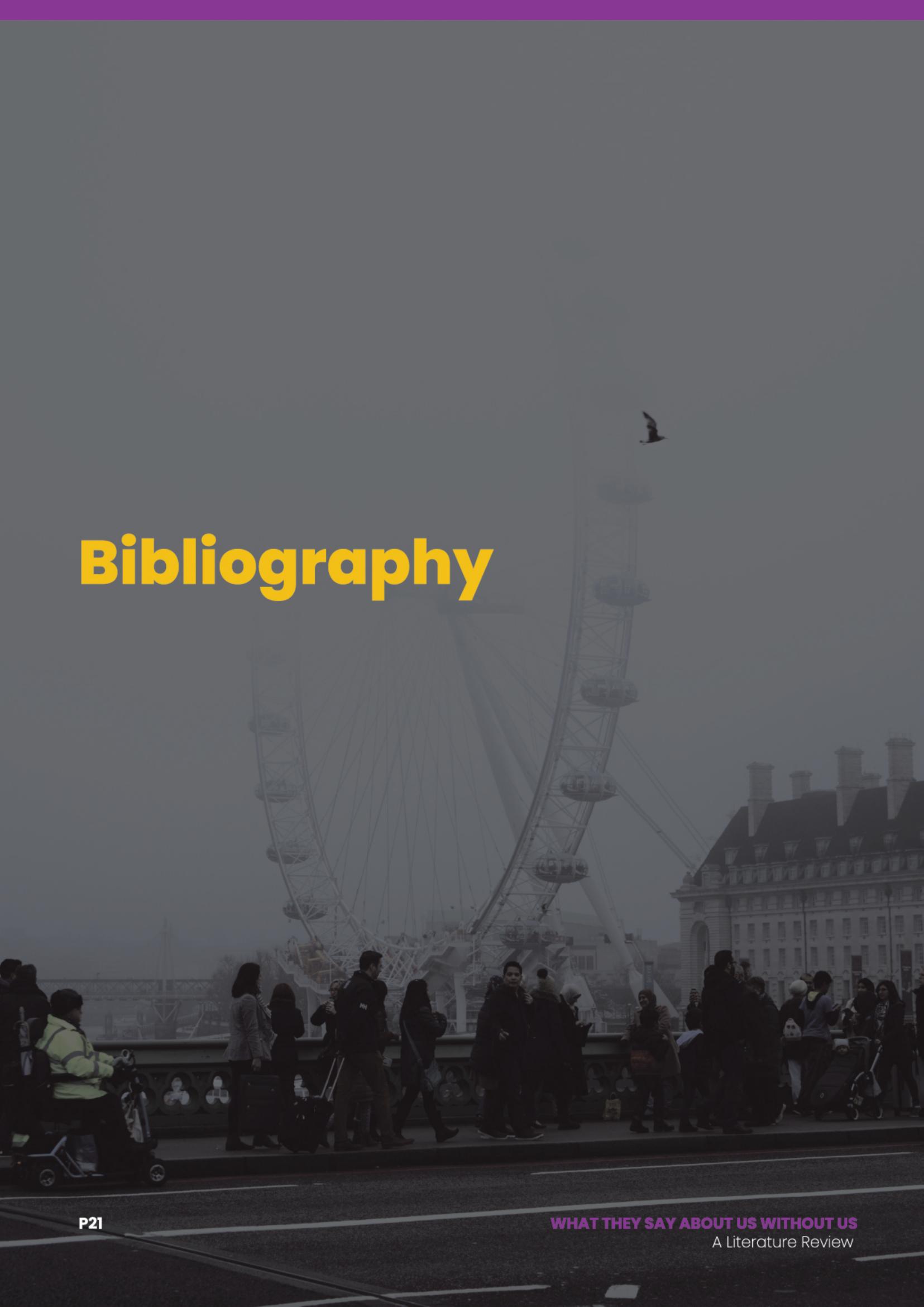
New environmentalist groups are comprised largely of white middle-class females and males from parts of rural England or from newly settled gentrified communities in the inner-city. Movements and campaigns for cleaner air which are active in London are reflective of this and thus their protests in parts of South London such as in Brixton for instance (Urban, 2019) are distinct for a lack of a young black presence. This then feeds into "talking about us without us". Such a presence however must have a stake if the air pollution crisis is to find solid ground in the urban locale.

Despite the predominantly white middle-class dominance in the environmentalist movement, there is at least now a growing recognition that this has to change by incorporating race and class issues into the environmental equation. Not only will this ensure relevance but also concern for those communities which are the most impacted by pollution, climate change and poor air quality.

There have been visible signs, though somewhat belated, that these movements have begun to take seriously the issue of social justice for all minorities, particularly after the global racial tensions sparked off by the brutal killing of George Floyd. This may help to translate into an environmental narrative within the BAME communities that due to air pollution, "we actually can't breathe".

Recommendations

- Further research to assess community understanding of air pollution and what the communities regard as useful projects.
- Families from different socio-economic backgrounds negotiate their environments and concerns about sustainability differently, there is not a one-size fits all model. This is relevant when the available information and possible alternative options have not been exposed to them. Families from poor inner-city families therefore need to play a role without it being left solely as the preserve of the stereotypical environmentally-engaged white middle-class 'green' family. A way to being this may be for local families and communities to be informed of environmental and safety hazards in their locales and be empowered to raise these concerns and understand the detrimental effects.
- Disadvantaged families struggling for food do not appreciate being lectured about 'consuming less' especially during difficult times or about changing their lives, especially when there is no social protection for such transformations to occur. Notions of 'sharing' however, may be an area which working-class peoples would concur and support.
- Further to this, while those who are middle-class can afford to take days off work to protest and lie down in the middle of the road without the worry of being deported, sacked, jailed for months or sanctioned this is not the reality for many disadvantaged sections of the community in the urban locale.
- A new type of 'Cooltan Collective', as it were, is needed. Comprised of energetic BAME youth from local areas, collaborating to inform, partner with and lead on local environmental issues and who have the urban cultural capital to slightly change the narrative of local environmental issues.
- A grassroots up approach, with more BAME young men involved, to tackle air pollution with less emphasis on disruptive demonstrations or performative protests towards meaningful engagement with schools, colleges, popular cultural figures, key stakeholders, developers and local government authorities about air pollution and the impact in inner-city communities. This will facilitate 'embedded local environment activists', in deed if not in name, aware of issues of air pollution in their own communities.
- Creating more green spaces in the urban locale to help reduce pollutants, however such 'greening' should be integrated with equitable housing plans as otherwise greening can serve to further environmental inequalities in the urban space as the quality of life for some increase at the expense of that for others.
- Environmental regeneration and green renovation cannot be distributed solely among those with greater wealth and residential privilege. More representation of local people is required so that their views and voice contribute to the sustainable delivery of public services in their locales. Along with greater inclusion and participation of BAME communities in the decision-making processes.
- Designing urban spaces to include greener spaces for informal sellers and disruptive enterprises to sell goods to commuters. This is important as many of disruptive entrepreneurs in areas such as Brixton for instance have good networks with the urban locale and marginalised communities and can make environmental issues more appealing and relevant.
- Collaboration which merges the expertise and technical skills of environmental activism with the networking skills and energy of communities. Included in this is encouraging public-private partnerships aimed at improving both socio-economic and environmental factors of low-income areas.
- Community developers, local residents and environmental organisations need to form a coalition to tackle issues which affect their locales initially.



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