

## Fighting for air: an experiment in community action



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"I want to see if people power can give us the clean air that we need", explains Dr Xand Van Tulleken early in *Fighting For Air*. The documentary, which screened on BBC2 on Jan 10, 2018, poses a straightforward question: "what does it take to cut air pollution in one place for one day?" The place is Kings Heath, a southern suburb of Birmingham in the UK midlands (specifically, Kings Heath High Street and an adjacent road on which a local primary school is situated).

The irrepressible host Van Tulleken begins by donning a chemical protection suit. He strides up and down a main road, sheltered from the noxious fumes, and undertakes a handful of tests. Then he removes the suit and heartily inhales the local air. He undertakes the same series of tests. In truth, the results are something of an anticlimax. There is a slight rise in blood pressure and indications of a decrease in cognitive ability. But it offers a neat opportunity for Van Tulleken, a medical doctor, to outline the harmful consequences of exposure to NO<sub>x</sub> and particulate matter.

In Kings Heath, it is diesel vehicles that are responsible for most of the ambient pollution, a consequence of successful but misbegotten national policies that encouraged road users to switch from petrol engines to diesel. Van Tulleken connects a diesel engine to an emission testing device to track NO<sub>x</sub> emissions during an average journey. The graph spikes whenever the car pulls away. This explains why the air in congested areas such as the high street is so toxic—vehicles are continually stopping and starting. The same test shows that drivers are far more exposed to NO<sub>x</sub> than pedestrians—leaving the car at home would be good for everybody's health.

The effort to enlist the community has mixed results. Van Tulleken takes to the streets to invite shoppers to a meeting to discuss Kings Heath's air quality. "You're really wheezing", he protests, after a young woman clutching an inhaler declines his invitation. "Oh, it's not to do with pollution", she answers, perhaps just to get away. Still, there is a reasonable turn-out for the meeting, and a cadre of enthusiastic volunteers to take control of the experiment.

Not surprisingly, the team largely consists of those who favour meaningful action. The measures they select include synchronising traffic lights to ease the run of vehicles, encouraging parents to send their children to school on foot, and publicising the issue of pollution on West Midlands radio. The most contentious proposal is to suspend parking on the high street. Stan, the elderly local butcher, offers vocal dissent. "Everything in moderation", he urges, fretting that a more hostile environment for cars will drive away customers. It is a legitimate concern, and it ought to be taken seriously.

Stan is sympathetic to the case for improving the quality of the local air, but does not want to damage the economic health of the area. The rest of the task-force are younger. They ride bicycles. One owns an independent

coffee house that also sells craft beer. These are people who are comfortable with the notion of penalising car users. Moreover, they were not around during the postwar years when Birmingham was enveloped in impenetrable smog. For Stan, the environment has visibly improved (though, of course, the pollution generated by diesel combustion cannot be seen). Others feel that things are worsening, and that current safeguards are inadequate to address the problem. But both sides have one thing in common: they are propelled not by ideology, but by a desire to see Kings Heath flourish.

On the appointed day when the proposed measures are put in place, the number of vehicles visiting the high street shows no decrease. Nonetheless, there is a substantial drop in emissions, thanks to the parking prohibitions and the smoother flow of traffic. It is an interesting experiment. The motivation of the participants is incontestable, but so is the indifference of several of the townsfolk. A visit to National Express, which runs Kings Heath's bus services, reveals that electric vehicles do not have the capacity to accommodate the routes through Birmingham. But this will eventually change—several cities have already made the switch to electric buses. Ownership of diesel vehicles in the UK has probably peaked; the tax incentives that made them so attractive have been discontinued, and there is widespread recognition of the damage they cause. London already charges the most polluting cars to drive through the city. From April 2019, these charges will be extended to include all diesel vehicles that are older than four years. Other cities may well follow suit. Were Van Tulleken and the BBC to repeat their experiment in five years time, the results are likely to be even more encouraging.

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