

STFC on-line meeting: 26 January 2021

*Social scientific perspectives  
on current air-quality issues:  
knowledges, practices and difference*

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# Making, measuring and modelling air quality:

In the last 25 years our understanding of local air quality has changed fundamentally, even if UK air quality itself has not improved to the extent anticipated.

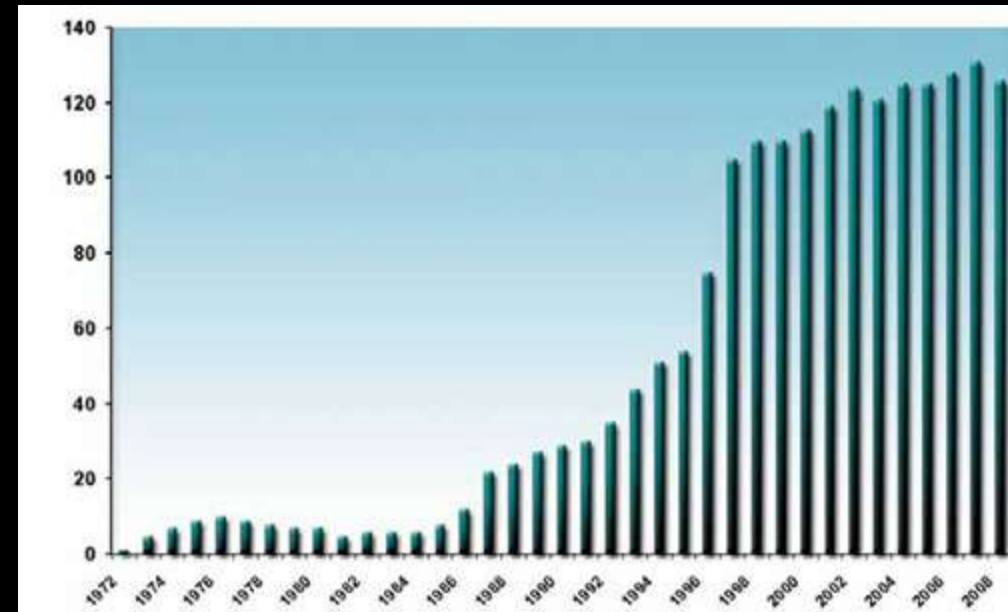
Much of this rise in understanding has come from improvements in monitoring and modelling, and new techniques and insights related to spatial interpretation.

The key policy problems are about how to meet targets without (what is seen as) disruptive changes to citizens' lives and economic wellbeing.

There are questions about the health impacts and particularly how much people understand and believe in the consequences for wellbeing.

Number of government funded automatic measurement stations in the UK

[uk-air.defra.gov.uk/networks/brief-history](http://uk-air.defra.gov.uk/networks/brief-history)



# Air-quality knowledge:

There are two issues here. The first is about trust in (or scepticism about) official claims about air-quality standards and effects – how they are measured, quality-assured and communicated. ENGOs have been influential in critiquing official interpretations and in pursuing action through the courts.

There is a second issue about citizens' own understandings of air quality (in and around their homes, on the travel routes they take, at work, school or college) and how citizen knowledge can “speak” to officially sanctioned interpretations.

Connection to phones and the Internet has offered to change the ways citizens engage with air-quality issues.

There are also novel possibilities around Citizen Science.



## Air-quality practices:

Air pollution commonly arises from things ordinary people do (drive or commute or heat their homes or enjoy fires) and it is appealing to think about ways to solve this by changing people's attitudes and behaviour. Influential social scientific studies have criticised the standard approach known as "ABC": attitudes, behaviour and choice.

There is a growing body of social scientific work that emphasises the role of other agents in shaping what people choose to do – for example heating engineers or builders, DIY outlets, transport authorities and so on. Such agents shape the routines which channel ordinary people's conduct (these are often referred to as "practices").



Charging point at Edinburgh University, near the conference centre – image from <https://www.edinburghfirst.co.uk/our-blog/electric-charge-points/>



## Air quality and difference:

The final issue is about difference. For many (air-quality) policy purposes it is helpful to think about people as just “people” – individuals who, of course, differ but who differ in statistically manageable ways. Or they may be thought of as (members of) households (since a household has a gas supply and so on).

But social scientists have highlighted differences between groups of people which differentiate their links to technologies and thereby to air-quality issues. For example, there is current policy concern around “burning” – people having open fires or wood-burners or BBQs and “chimineas”.



Commercial advert for a La Hacienda outdoor fireplace 2021

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