

The artist Robin Price has been working with the environmental atmospheric scientist Francis Pope on creating images that show air pollution that would otherwise be invisible. Source editor John Duncan talks to them both about how the project was developed.



The artist Robin Price with digital light painter.

John Duncan: *Francis, can you tell me about your own research and how it relates to Robin's work?*

Francis: I am interested in aerosol particles which are the small particles found in the air, typically less than ten microns in size. To give you some scale, human hair is about seventy microns in diameter. So these are small particles floating around in the air. They are everywhere, even in the most pristine environments but are also produced by pollution emissions, things like cars and industry and dust resuspension and they are harmful for health. Most of my work in one way or the other revolves around aerosol particles.

What was your role in the development of this project?

Francis: We were looking at these low cost sensors and Robin got introduced to me and said he was interested in doing sensory work. It aligned very nicely; whilst air pollution is one of the major environmental risk factors in ill health, most people feel there is nothing that can be done. So actually being able to visualise it, in these light paintings, rather than just having a graph, or a table is a really effective way of engaging people.

Robin, how did you move from studying theoretical physics to having an artistic practice?

Robin: Before, I was doing visuals in nightclubs, I still am, and making music. And I've also had an interest in electronics that ran tandem to the science. I was going to do a PhD in theoretical physics but when I came to the end of my Physics Masters I had had enough. So I went to the Sonic Arts Research Centre at Queens University in Belfast to do a PhD. After that came a broader creative practice that involved more interactive gallery installation and interactive digital art.

Do you think that you carried things from your science background into your arts practice?

Robin: Yes, in the skills that it gave me to build my own equipment. And having a framework to break problems down and thinking how you could put them back together. And it gave you confidence with technology.

How did you come into contact with each other?

Robin: I did a residency at Birmingham Open Media, BOM, which is a gallery specialising in art, science and technology crossovers. As part of the residency programme, they can partner you with an academic. I was interested in air pollution and they put out a call for academics to work with me and Francis responded.

Francis, had you worked with artists before? What drew you into the orbit of Robin?

Francis: We have a shared interest in ambient music and playing with little bits of tech. There is definitely a synergy there between the two of us.

Were there any differences or similarities in how you approached working with Robin, compared to how you would approach working with somebody else from a pure science background?

Francis: I don't think so, though the photographs are by default a snapshot in time, whereas for scientific papers and presentations we would need a longer timeset to have a more robust view of the statistics. Not to say that Robin's aren't robust but we would tend to have a greater data density.

Robin, you worked with sound before, was there a reason why you moved to a visual representation of the data involving photography?

Robin: The opportunity came to go to Delhi to take part in a conference. Until then the project had been to try recording sounds from different places and also recording the pollution sensor levels but I wasn't massively in love with it and I couldn't see how it was going to fit together. At the same time,