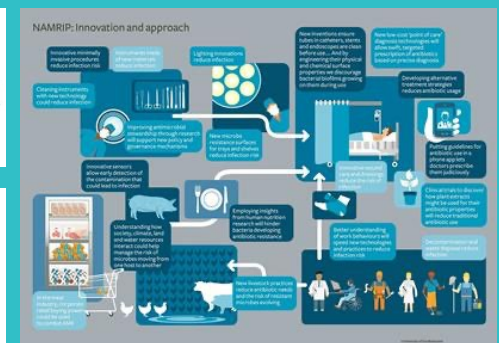


Routes of Infection / Routes to Safety: Creative mapping of human-viral behaviours on the bus to understand infection prevention practices



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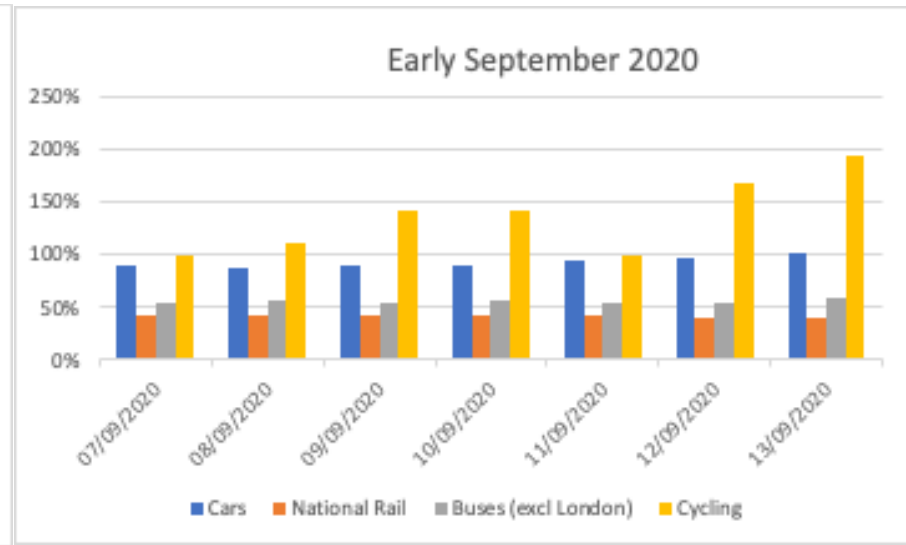
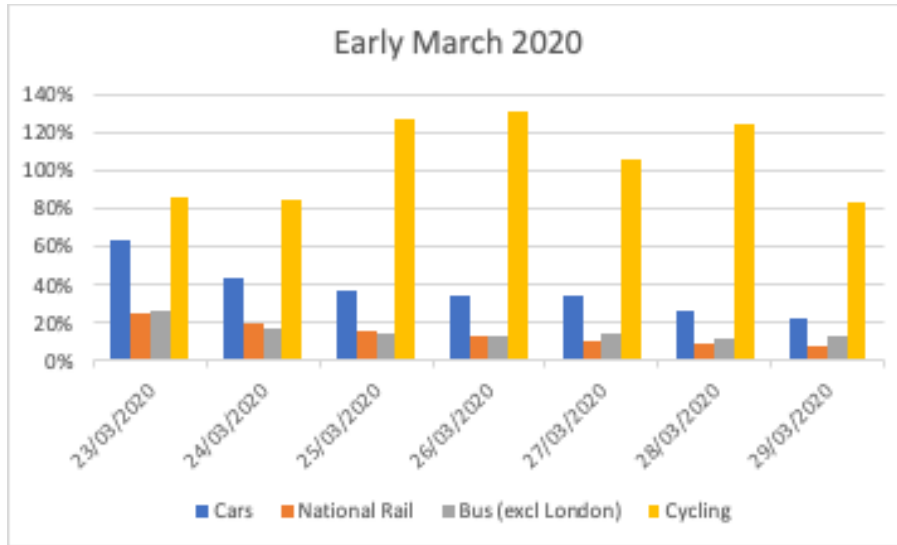
How SARS-COV-2 spreads from person to person (WHO 2021)

'The virus can spread from an infected person's mouth or nose in small liquid particles when they cough, sneeze, speak, sing or breathe. These particles range from larger respiratory droplets to smaller aerosols.'

- *Current evidence suggests that the virus spreads mainly between people who are in close contact with each other, typically within 1 metre (short-range). A person can be infected when aerosols or droplets containing the virus are inhaled or come directly into contact with the eyes, nose, or mouth.*
- *The virus can also spread in poorly ventilated and/or crowded indoor settings, where people tend to spend longer periods of time. This is because aerosols remain suspended in the air or travel farther than 1 metre (long-range).*

People may also become infected by touching surfaces that have been contaminated by the virus when touching their eyes, nose or mouth without cleaning their hands.'

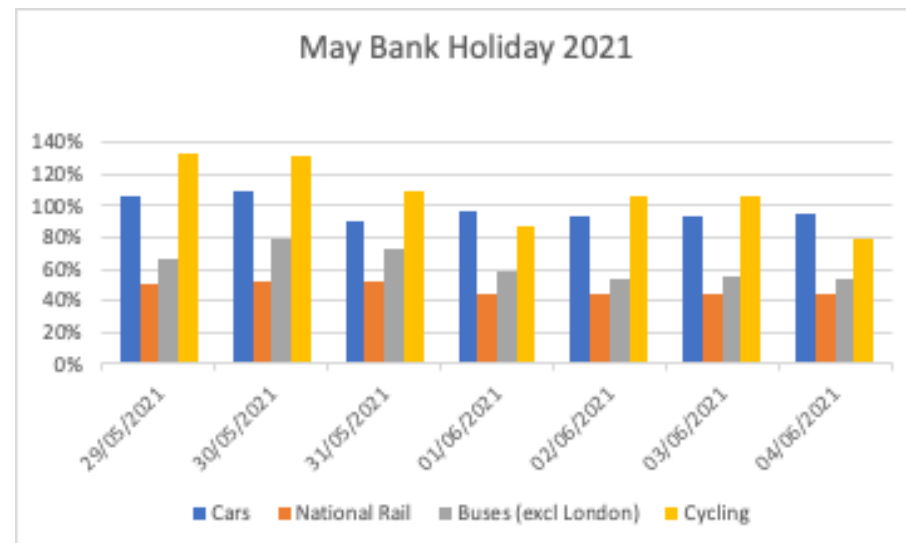
Transport use statistics (DFT)



Public Transport use April 2020 was **10%** of April 2019 figures in Bristol.

Sept 2020, car use at pre-pandemic levels; bus **50%**.

First week of June 2021, cars at c. **100%**, buses c. **60%**.



THE RESEARCH AIMS

Jan 2021-Jan 2022.

1. To understand cleaning practices, passenger behaviour, bus architecture, SARS-CoV-19 prevention knowledge:

Ethnographic/participant observation of bus stops, travelling on bus Feb-April 2021 25 of 50 hours, interviews 12 of 25 Somali-heritage bus passengers, 2 of 5 bus cleaners, 2 of 15 bus drivers.

2. To integrate social scientific data with microbiological microbiome study of the bus, surface swabbing **and aerosol sampling**.

3. To use creative viral aesthetics for public health communication mock mapping experiment (**especially viral aerosols/changing Covid forecasts/risks**), informational materials / video / toolkit, stakeholder focus groups

Connecting with industry and third sector, e.g Bus Users, bus companies, Confederation for Passenger Transport, Somali community organisation. 4

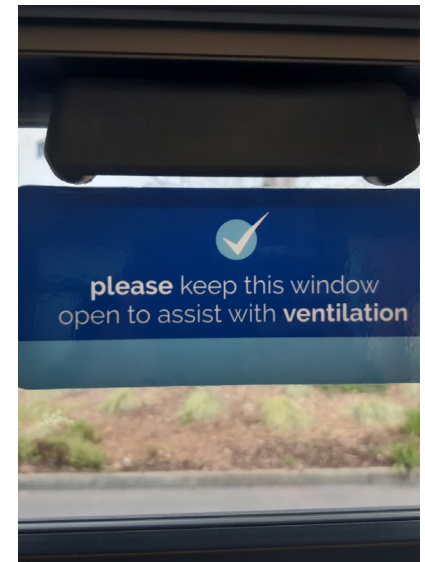
KEY LITERATURE / IDEAS

Where we're departing from

- Infection prevention in healthcare and how that is applied to the everyday.
- Cultural study of air, breath and breathing as a risky practice.
- Everyday urban geographies of public transport.

Where we're going to

- Securitising the body to viral threat
- Temporal human-viral geographies of Covid risk in the everyday.



INITIAL FINDINGS from interviews/ethnography

What people have talked about

- I did not feel comfortable about taking the bus

“It might be a long or short journey, but there could be someone inconsiderate that's not wearing a mask or anything. It's like a fear. It's just a fear.”

(Male, early 20s, occasional work commuting)

“Yeah, during the – during the first lockdown where the schools were shut, everything was shut, we weren't travelling anywhere. If my daughters had a doctor's appointment, we – I was always cancelling it because I did not feel comfortable taking my kids on a bus.”

(Female, travelling for appointments/shopping)

“So, I was in a mood which is careful and alert and I was scared deep down from the virus.”

(Male, 64 yr old, travelling for shopping and hospital appointments)

ETHNOGRAPHY findings

What we've observed

Hot Seats - with higher 'bottom-fall'

Upstairs back	0	3	5	8	front	across 14 buses
	3	2	stairs	5		
	Upper	Lower	Flipseats			
Downstairs back	19	16	4		front	across 22 buses
	18	11	4	stairs/driver		

Other ethnographic observations:

- people using bus shelters for loitering / resting
- variable social distancing at bus shelters and on buses
- good mask wearing at some times, not others
- signage and passenger practices focussed on distancing rather than ventilation or touch
- irregular open windows on buses

INTERVIEW Findings

What people have talked about

- ‘Take Covid as a serious thing, follow the Guidelines’

“You’ve just got to live with it and just take Covid as a serious thing, follow the guidelines and everything, and going forward just make sure that you’re doing your best to stop the spread.”

[...]

“So I just said to myself, you know, you need to mature and wear a mask, face, space, and hands, that’s it, and follow the rules.”

(Male, 21 yr old, travels 45 mins by bus for work)

INTERVIEW Findings

What people have talked about

- ‘I don’t know how [fresh air] applies to me yet, but I have heard that it’s good because it releases the Covid’.

“Q1: So you’re saying you’re not sure about the fresh air bit and how that applies to you.

A: Yeah, I don’t know how that applies to me yet, but I’ve heard that it’s good because it releases the Covid. That’s what I heard, but I don’t know that much science about it, but it’s very interesting.”

(Male, 20s, bus travel to work).

“Q1: Like sometimes the windows aren’t open and they’re high up aren’t they, and it’s always a challenge how to keep them open, particularly in the winter.

A: Yeah, it is a challenge, but at the same time we’ve just got to make sure that they’re open 24/7. That’s it when it comes to that because it is a government rule now. Scientists have said, “Keep your windows open,” it gets rid of Covid as far as I’m concerned, and we should follow that.”

(Male, 20s, travels 45 mins by bus for work)

INTERVIEW Findings

What people have talked about

- ‘I feel more relaxed now’ - explanation of how and why.

“I feel more relaxed now. I use, uh, I go back using the bus again. And before, I should avoid, you know, using the bus even if I need it I should walk because the pandemic is were – the Covid was quite scary, I used to walk to town centre and even if I see people or meet even in the road, I should avoid them as well.”

“But now situation changed, maybe because of the jab that I took or maybe the weather change or maybe the God become kind to us. [...] I just know that the situation has changed and now I can think about the virus, it’s not like before. It is not around like before and it is – I feel more safe than before.”

“And as a Muslim person you got a duty not to put yourself at risk but also not to put others at risk when you know you're not well. So, like what happened in the past, during this pandemic is people, they shouldn’t leave [...] their city or in their house. And that was making easy people to stay indoors. And also he also mentioned, you know, knowing that you infected and interacting with others is like committing suicide, you know, throwing yourself into fire. And that is religious view, that's what Prophet say.”

(Male, 70, travelling

for shopping)

INTERVIEW Findings

What people have talked about

- “People like to see us doing [cleaning], [they are very] ‘grateful, particularly the elderly’”.

“Yeah. I worry if the people, you know, touch their nose and hygienically, their hands are not clean. Also they touch the bus, like the handles. I believe even if they have got the handle on their hands and I try, I try to use a cloth so when I have got the gloves, I can touch, or I keep my hands in my pockets and I stay aside.” (Male, 20s, travelling for work)

“With me, what I do is usually I – like I used to have a – I have a sanitiser, a small one, so before I go on the bus I sanitise my hands and before and after, immediately I come off, I just like immediately sanitise it. Whenever I get to any place I just wash my hands with soap.”

(Male, early 20s, occasional work commuting)

“People like to see us doing it” they are very “grateful ... particularly the elderly.”

(Cleaner, female, 40s)

YOUR QUESTIONS