

5G Technology Demands a Precautionary Approach: An Interview with Michael Bevington¹

By Michael Bevington and Richard House

Man today has a fundamental choice... between robotism and humanistic communitarian socialism.

Erich Fromm

One of the most contentious issues in the world of technology is that of the universal drive to roll out 5G infrastructure across the planet. 5G is the fifth-generation wireless technology for digital cellular networks whose widespread deployment started in 2019. Virtually every major telecom provider is either deploying antennas, or is intending to deploy them in the near future.

The 5G roll-out is being challenged by scientists, medical practitioners and concerned citizens right across the world (see https://tinyurl.com/s7rkeug), not only on health and safety grounds, but also with regards to its enabling of mass surveillance and the so-called Internet of Things, linking even to what we might call – after J.-F. Lyotard – 'the march of the inhuman' in hyper-modern society (see, for example, Sim, 2001; Perlas, 2018; Rose, 2019, Naydler, 2020). These are issues which raise questions about our human future that all humanistic psychologists must surely be greatly concerned about.

In this exclusive interview for *Self & Society*, researcher and authority on 5G technology Michael Bevington talks to Richard House about why we should be concerned about, and take a precautionary stand on, 5G.

Richard House [RH]: Michael, you're at the forefront of challenging the roll-out of 5G technology that is currently occurring in Britain and across the globe, without any informed democratic conversation. Can you tell us how you first became interested in this issue?

Michael Bevington [MB]: I first became interested when wifi was installed where I worked. By the end of the first day I was suffering headaches, heart palpitations and numerous pains. They disappeared at home in the evening and at weekends but returned in the presence of wifi, becoming worse and worse. I discovered that these were the symptoms of electrosensitivity (ES), described in medical studies since 1932 and proved as a debilitating condition in the USSR in the 1960s. It is now recognised by expert scientists internationally, although some wireless industry lobbyists still try to deny its existence.

I am chair of the trustees of the charity Electrosensitivity UK (http://www.es-uk.info/).

We aim to support the 3.6 per cent of the population sensitive to non-ionising, radiofrequency radiation (RFR), about 2,412,000 people in the UK, and especially the 1.2 per cent who are severely affected. This is over 800,000 people in the UK – a similar number to those with Alzheimer's.

A recent survey based on cases in the UK and worldwide estimated that 0.65 per cent of the population are denied full access to work or schooling because of this intolerance, with a few even ending in death from suicide or cancers. In the UK this is some 435,000 people, higher than the number registered blind or partially sighted.

Many people do not realise what is causing their ill health, since you cannot see the RFR from masts, mobile phones and wifi, and most people cannot feel it. Nevertheless, it affects every cell in the body and the symptoms can be delayed and cumulative, making it hard to assess. 5G will add to the amount of wireless radiation or electrosmog, causing more illness, including electrosensitivity and cancers. This is a concern to all who understand the scientific evidence and why 5G is considered by the majority of involved scientists as a significant public health problem.

RH: These are shocking figures, Michael. In my own campaigning on this issue, I've got into arguments with people playing what I call the 'I'm a scientist...' card – the often unarticulated implication always being that they are therefore the expert, I'm not – and that they know that the science behind our concerns are based on 'fake' or 'fringe' science. How would you respond to such claims?

MB: My analysis of thousands of scientific studies reveals that by far the majority show adverse effects. This confirms reliable reviews which find, say, up to 78 per cent of studies show reduced fertility from wireless. These are not fake or fringe but robust mainstream studies with a consistent and convincing pattern of harm.

No serious scientist claims that RFR does not have significant biological and non-thermal effects. Numerous therapeutic procedures common in hospitals depend on it. So does electronic warfare,

especially in the Middle East wars. When RFR was recently deployed against embassy staff, it caused the same brain damage as seen in 3d fMRI scans of people with symptoms of electromagnetic hypersensitivity.

The vast majority of mainstream expert scientists recognise harm from low-level RFR. Over 250 have signed the International EMF Scientist Appeal (https://www.emfscientist.org/) urgently calling on governments and regulators to adopt protective long-term and non-thermal guidelines in the light of this overwhelming robust scientific evidence.

At present, 5G trials involve narrow focused beams of radiation at such great intensity that they may break ICNIRP's short-term heating guidelines. let alone long-term guidelines like Bioinitiative, EUROPAEM 2016 or IGNIR. There are still no experimental studies on any additional health effects of these 5G beams on humans and wild life, although it is already known from thousands of existing studies that the RFR used by the 5G beams is harmful. The exclusion distance based on heating short-term guidelines, not long-term biological ones, from a 5G mast at 3.5 GHz transmitting a total of 200 W using an array of 64 antennas is 25 metres (ITU, 2017). This makes such a 5G mast impossible to locate in many urban and residential areas, and even more difficult in those countries which have wisely adopted longerterm guidelines, such as 10 per cent or 0.5 per cent of ICNIRP.

There is a growing literature of studies analysing millimetre frequencies, proposed for future 5G. Many of these indicate serious adverse effects, partly via extra heating, as through sweat ducts, but also non-thermal, especially in eyes, skin and neural systems (see below for some studies).

In fact, if anyone follows fake or fringe science, it is the small cartel still clinging to Schwan's long-invalidated hypothesis of 1953, that the only adverse effect of wireless radiation is bodily heating of one degree within six minutes. Exercise can produce this temperature rise, but without the proven effects of RFR, including ES and cancers. The 14 members of ICNIRP, a private lobby group spun out of the radiation industry, still make this

error, denying non-thermal adverse effects proven beyond all reasonable doubt.

Unsurprisingly, some people confuse fake with established science when wireless industry lobbyists deny the established evidence. It may also be true that some people are addicted to wireless devices and, in order to alleviate their worries, prefer to believe fake claims rather than the proven science.

In contrast, many insurers are aware of the difference between fake and real science. Many follow the mainstream majority science, accepting non-thermal effects, and exclude all cover for wireless devices. Other underwriters classify wireless radiation like 5G as a high-risk carcinogen, like asbestos.

RH: That's all very clear, Michael. I'm not sure whether it's a political-economic, a sociological or a philosophical question, or some cocktail of them all – but I'm fascinated by how two groups of scientists can reach such polar opposite views about the same technology and its effects. Do you think that scientists who claim 5G to be safe are wilfully misleading us, are intoxicated by their own ideological position and/or working within 'incommensurable' paradigms (Thomas Kuhn, 1962), or are just bad or lazy scientists? (or again, some mixture of all of these).

And in a stream of MPs' written parliamentary questions on 5G, the government keeps trotting out the same 'official' line that the body responsible for health and safety, Public Health England, declares 5G to be safe – so there's no need to worry our little heads about all this alleged 5G scare-mongering.

It's a huge question, but can you briefly unpick all this and say what's going on here?

MB: This division is, and always has been, between profits and health; it is not scientific. It is between those who see the need for precaution on 5G, and those who think that industry profit, increased taxation or military advantage outweighs health. The International Commission on Non-Ionizing Radiation Protection (ICNRP) has admitted since 2002 there are people who need

non-thermal guidelines at levels below its own heating guideline, since its heating guidelines still deny long-term effects like ES and cancer, and thus do not protect against them.

For smoking, governments long preferred increased taxation and reduced costs through early deaths, to admitting dangers. For asbestos, known since antiquity as unhealthy, governments allowed its convenience until a legal case in the 1970s led to the current restrictions.

For wireless radiation, the USSR adopted non-thermal guidelines in 1959, but the USA followed Schwan's 1953 heating mistake for economic reasons, and this division continues. The UK's drive for 5G follows the US approach. It is led by Matt Warman, MP, the digital minister, who reportedly said on 17 October 2019: 'There is no credible evidence to back up [these] concerns and huge evidence for the economic benefit.' In contrast the majority of scientists (https://www.emfcall.org/) say that ICNIRP's guidelines, still used by the UK government, are 'unscientific and protect industry, not public health'.

More radiation like 5G will cause economic decline. Fertility rates are falling in South Korea, the country with the highest usage of mobile phones, and some scientists predict a rise in illnesses linked with this radiation, from autism to diabetes, ES and cancers.

RH: Much material for a far longer conversation here, Michael – thank you. Some anti-5G campaigners are far more exercised by 5G's implication in ecosystem degradation, the Internet of Things and the march of AI / Super AI, data protection questions and mass surveillance, than they are by its health impacts. Do you share any or all of these additional concerns?

MB: My concern is the established health dangers of 5G. Nevertheless I understand people valuing individual liberty against increased surveillance or AI, but all technology can be used for good or bad.

I agree that the degradation of the ecosystem from wireless radiation is also crucial. Although less studied than human harm, the weight of evidence now strongly suggests both immediate and longterm damage. For instance, at the immediate level, RFR has long been shown to disrupt the geomagnetic navigation system used in bird migration, risking individual species if nowhere is left free of 5G radiation from masts and satellites.

Long-term effects are also evident, such as the decline in insects and wild bees by over 70 per cent in industrialised countries over the last decade. Wireless radiation is certainly involved, although probably in synergy with pesticides and changes in habitat. This will, in turn, reduce bird and bat populations, as is already happening.

Animals are affected too, as pet owners aware of wireless effects can verify. Trees and plants are particularly damaged in direct line with a mast, since they cannot move to escape the radiation. RFR weakens the immune system of trees, as of humans, probably explaining some of the increase in damage from viruses, bacteria and fungi.

If government continues to choose wireless devices over fibre-optic cables, then the earth faces a bleak future and ES people will greatly suffer. But if the science and common-sense prevail, we can harness this technology for our benefit rather than destruction.

RH: To the extent that in a corporations-dominated market society, technology will tend to be deployed in ways that serve and reinforce the existing system and mode of production (Althusser, 1971), this is certainly an issue that the political left urgently needs to engage with. And anyone who takes the detailed copious references that you've provided here remotely seriously cannot but conclude that at the very least, there is a very serious issue here that needs urgent independent investigation — and that any policymaker ignoring these questions is arguably guilty of a gross dereliction of their democratic duty.

Thank you for your clarity and insights, Michael.

Note

1 This interview was originally written for a left-wing newspaper which, in the event, did not have the space to publish it.

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