

15 BLOGS ON....



Information

Controversy

Humour

Not to be read as a text book but as short blogs, intended to stimulate discussion on some of the key noise issues of the day.

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Noise: Worldwide and Widespread



It may be a surprising fact. Noise regularly tops the list of complaints in Rio de Janeiro. And Rio is not untypical. In Europe hundreds of millions are exposed daily to noise levels which the World Health Organisation (WHO) regards as unacceptable (1).

The most recent statistics from the UK Government (2) reveal that, although 72% of respondents had a positive attitude to their local noise environment, 48% of people feel their home life is spoilt to some extent by noise.

In the UK

5 million people are significantly impacted by road traffic noise;

7 million by neighbour noise;

2.5 million by aircraft noise.

World-wide more people are disturbed by noise on a daily basis than by any other pollutant.

Yet in the eyes of many decision-makers noise remains the 'Cinderella' pollutant.

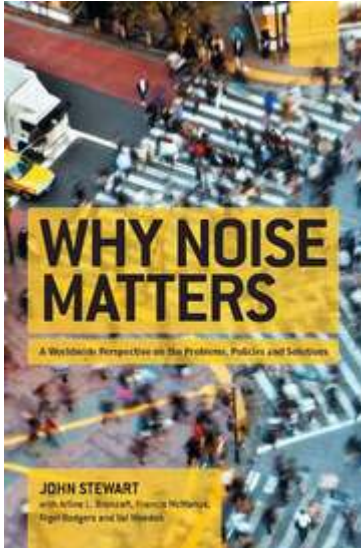
References:

- (1). Why Noise Matters, Stewart et al, Earthscan, 2011
- (2). file:///C:/Users/Dell/Downloads/12378_SummaryReportV1.0.pdf

Why Noise Matters

'I have never seen anything that affects people like noise does' Pamela Parker Shine, a noise inspector in Montgomery County

When noise becomes really disturbing, it can dominate every aspect of our lives and people will move mountains to get rid of it.



We wrote in our book *Why Noise Matters (1)*, published in 2011: *When noise – any noise – becomes really disturbing, it can dominate every aspect of our lives. It always seems to be there, an ever-present shadow, darting, taunting, tantalising; forever just out of reach. The desire to get rid of the offending noise by almost any means possible can become overwhelming. People spend their waking – and sleeping – hours fantasising on how to stop it. They dream of poisoning the barking dog; of shooting down the roaring jet; of smashing the neighbour’s stereo; or of derailing the latest lorry that thunders past.”*

And, for the most part, we are talking about your average person who led a fairly typical life until the noise hit. Some will be amongst the 10% of people the German psychologist Rainer Guski (2) identified as particularly noise sensitive. Many will not.

Most noise sufferers are not good, certainly initially, at solutions. They just want rid of the noise. But they often don’t know how to go about it. They have not been in this situation before. They are not campaigners or politicians. But the drive to get rid of the noise means many find themselves doing things they never imagined they would: going to rallies; attending public meetings; taking part in demonstrations; writing letters; speaking with lawyers; neglecting family; foregoing a social life.

Millions around the world are not just irritated by noise but deeply disturbed by an aspect of it. Many don't have the choice to move away. The real tragedy is that the solutions do exist to cut noise.

And it's why the UK Noise Association exists. It is why Cut Noise tweets.

References:

- (1). Why Noise Matters, Stewart et al, Earthscan, 2011
- (2). ‘Personal and social variables as co-determinants of noise annoyance’, Noise and Health Journal, vol 1, no 3, R Guski, 1999.

There's a complaint about noisy neighbours every 80 seconds



In 2019, nearly 424,000 noise complaints were made to local councils across the UK – the equivalent of one every 80 seconds. Music and parties (28 per cent), domestic (14 per cent) and animal noise (13 per cent) were the top three causes for complaints over the previous three years. London is the noisiest region, but Belfast, Newport and Coventry all make the top 10 noisiest local authorities. The figures are revealed in research from Churchill Home Insurance (1).

The noise makers are getting away with it

Despite the frequency of complaints, however, only one in every 54 resulted in a noise abatement notice (2) being issued. That's just a fraction over 2%. Some complaints can be resolved through a conversation with the neighbour. And some noise makers will stop after a warning. But this low figure must mean a lot of noise makers are escaping scot free. Local authorities can be reluctant to issue noise abatement orders because they need quite a high level of proof. Some have used anti-social behaviour orders instead since the process is simpler and quicker. But, nevertheless, it does seem that noise sufferers are not being well served.

We have a noise crisis on our hands

We hear a lot about the climate crisis. Nothing about a noise crisis. Yet, with a complaint every 80 seconds, this can only be described as a crisis; even an epidemic. It should not be left to local authorities to deal with this. Government needs to tackle the underlying causes. Government should also ensure that local councils have adequate resources to tackle the crisis.

Government action required

Music and parties account for a huge 28% of complaints. Motorists who break the rules get points on their licences, leading to a ban. Why not introduce a similar scheme for those who persistently annoy with their music. Three offences and you are banned from playing music for three years. Extreme? We think not.....given how widespread the problem is and the suffering it causes. Unless we are willing to impose these sorts of measures, we have no chance of tacking the epidemic of noise. If you can't handle your music, you lose it. If you can't stop your dogs barking, you lose them.

Indeed, we may need to go further to conquer the epidemic. Just as there is pressure on governments to ban the noisiest planes and oversize cars, oughtn't they to look at banning the most powerful sound-systems? It only seems extreme because we are not used to thinking about neighbour noise in this way. We can continue to kid ourselves that a complaint every 80 seconds doesn't signal an epidemic. Or we can take the radical action required.

We can continue to kid ourselves that a complaint every 80 seconds doesn't signal an epidemic. Or we can take the radical action required.



References:

(1). Freedom of information Act request issued to all UK councils on 24th January 2020. A total of 313 out of 382 local councils (81.9%) responded, of which 297 (77.7%) provided usable data. The councils that provided usable data accounted for 80.1% of the UK population.

(2). A noise abatement notice is an official notice given by a council to those responsible for causing a disturbance, telling them to either stop the activity or limit it to certain times to avoid causing a nuisance. <https://www.gov.uk/guidance/statutory-nuisances-how-councils-deal-with-complaints#abatement-notice>

(3). Consumer omnibus research conducted by Opinium between 29th May and 2nd June 2020. A nationally representative sample of 2,000 adults were polled, of which 914 stated that neighbour noise of some form had had a negative impact on their mental wellbeing. More detail: <https://www.directlinegroup.co.uk/en/news/brand-news/2020/09062020.html>

No escape from other people's noise



When I became a teenager in the 1960s I don't think there was a single public place where people didn't smoke - maybe in a church, but that was about it.

But these same places were much, much quieter than they are today. Fifty years on roles have been reversed. Smokers are banished from public buildings, forced to huddle outside in alleyways reminiscent of when they shared a sneaky fag behind the bike shed in the school playground.

These days it is noise which permeates our public spaces: whether it's the babble of shared offices; the television-dominated hospital wards; the sound-tracks in gyms; the over-long and over-loud announcements on public transport; the buskers with their penetrating sound systems or the almost ubiquitous background music in our shops, cafes, bars and restaurants. Fireworks are no longer confined to 5th November. Some public parks host one music event after another during the summer months. 'Boom' cars ruin some neighbourhoods. And the night time economy brings its own problems.

But aren't you stopping fun? I hear you say as you wonder if you've stumbled in error on to page 3 of The Oldie or the a brochure for Saga holidays. No so! We are not arguing against the playing of music or the right to listen to loud music. We are concerned that it is being imposed on people against their will. We can choose to avoid the Hard Rock cafe but tougher to avoid travelling on a train or bus or going for a stroll in the park. Impossible to avoid hospital. It is mighty inconvenient to need to walk the length of the high street find a place where you can have a coffee without music in the background or to be forced out of the gym.

John Stewart

Respect the local community



Making unacceptable noise outside is essentially disrespecting the local community. And the authorities are complicit in that disrespect if they fail to take effective action to deal with it.

Community noise can be dealt with. The relevant anti-social behaviour and planning legislation exists.

These are the key things which need to be done:

- prevent unacceptable noisy behaviour on the streets, including tough conditions for busking
- introduce tough restrictions on outdoor eating and drinking
- clampdown on 'boom' cars playing amplified music
- restrict the number of music events allowed in any one park or open space
- reject/modify new developments that would cause unacceptable noise to the local community
- close down premises that continue to present a noise problem in a community
- restrict fireworks to a limited number of public displays each year; promote the use of 'silent' fireworks

All this is not difficult. It simply requires the will-power to make it happen.

Solutions to.....Background Music



Regulate piped music and televisions in hospitals and nursing homes.

No patient should unwillingly be subjected to piped music or televisions in hospitals or nursing homes. Separate television rooms and headphones for people who want to listen to television or music in wards should be the norm, and also for outpatients.

Introduce legislation to protect workers rights.

Workers in shops, restaurants and elsewhere are often bombarded by piped music that is sometimes loud and almost always very repetitive. Such inescapable forced music is particularly stress-inducing. Legislation is needed to give workers the right not to have to listen to it in the same way that non-smokers have gained the right not to have to breathe others' smoke.

Provide tax-breaks for muzac-free shopping malls.

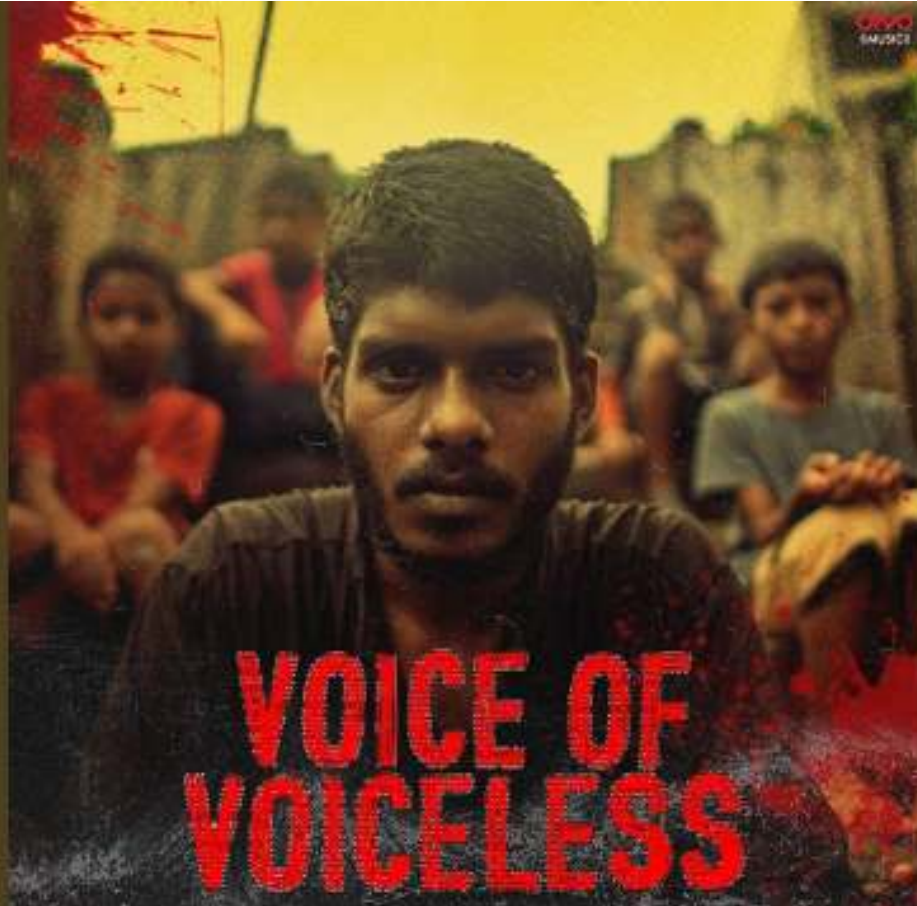
Shopping malls are in many ways like a public street. Particularly in many of the UK's smaller towns and cities, it is difficult to get what you want without visiting the mall.

Tax-breaks for recreational places that are muzac-free, have quiet areas or quiet hours.

Background music, some of its excessively loud, can deter some people from using gyms and swimming pools or going to restaurants and pubs. Many would appreciate being able to these facilities without the music on in the background.

For more information on background music, contact the excellent Pipedown: <https://pipedown.org.uk/>

ARE THE VOICES OF THE VOICELESS DROWNED OUT OF THE NOISE DEBATE?



Read
our
next
blog

Listen out for the voice of the voiceless



The better-off we are, the louder our complaints about any noise problem we may have. It can give the impression that noise is not really a concern for people who are less well-off.

Yet, the evidence suggests otherwise.

The danger is that the loud voices of the better-off over-influence decision-makers and so tilt policy decisions in their favour.

What is very clear is that in Britain and across the world poorer communities are the most *impacted* by noise and least likely to be able to escape from the noise.

Traffic noise has been described as largely a main road problem. Of course there are side roads with big traffic problems but 'main' roads are overwhelmingly the noisiest roads. This is partly and ironically the result of the 'progressive' traffic policies pursued over the past 20 years. Traffic-calming and closures of side roads funnelled traffic on to the 'main' roads where many low-income residents live. Low traffic neighbourhoods add to traffic on main roads, rather than reduce it.

Anybody can have noisy neighbours but we are a lot more likely to do so if we are less well-off. A MORI survey revealed that almost 20% of people with a household income of less than £17,500 (2003 prices) regularly heard noise from neighbours, including 93% of social housing tenants. In contrast only 12% of people with an income of over £30,000 could hear their neighbours.

It is a similar picture with wind turbine noise. When I wrote a short report called '*Location, Location, Location*' in 2006 on wind turbine noise, it became clear to me that those most affected by wind farm noise were poorer communities in rural areas.

I suspect aircraft noise may be the partial exception. It obviously depends on where an airport is sited but many flight paths fly over rich and poor communities alike. At Heathrow, for example, some of the wealthiest communities in the land – places like Richmond and Teddington – are overflowed but so are some of the most densely-populated and deprived wards in Europe. Even in aviation, though, there may be some bias against poorer communities. Would a developer have dared to build London City Airport on fashionable Hampstead Heath instead of run-down North Woolwich?

There is some truth that people can adapt to noisy surroundings, particularly if it is the only world they have known but there is evidence low-income communities can be very disturbed by noise.

25 years ago I spent a lot of time talking with local communities. In the poorer areas of Inner London there were some complaints about buses and trains, but, invariably, the conversation turned to traffic. That was the big concern: the air pollution and noise it caused; the danger it posed and the way it divided communities. Yet rarely did the communities have the time or resources to set up action groups. Today, in many of our towns and cities black and ethnic minority communities often predominate in these areas.

Perhaps the most dramatic evidence comes from the emerging economies of the ‘developing’ world. We covered it extensively in our book *Why Noise Matters*, published by Earthscan in 2011. This from Dr Yeswant Oke, a medical consultant and anti-noise campaigner in Mumbai (where noise levels are extraordinarily high):

‘People and patients are silently suffering as they feel helpless. People feel agitated and angry, impotent to some extent. Indians are very docile. They would rather suffer than have enmity with the neighbours. But lately patience is wearing thin, and more and more people are complaining to get relief.’

A survey in Vietnam found over a fifth of residents in both Hanoi and Ho Chi Minh City are highly annoyed by the typical daily noise levels in the cities. And this is just the tip of the iceberg. The concern about noise is there. It is just that it is not been voiced publicly.

The obvious danger is that, if the concerned voices of poorer communities are not being raised or not being heard, the louder, more confident voices of those of us who are better-off will drive policy much more than we should. We will get our peace and quiet...but perhaps at the expense of the voiceless.

This is what has happened on the roads. For decades confident voices pushed the traffic away from their streets on to the main roads. And, in a double whammy against those living on main roads, the ‘confident voices’ drive regularly along these roads past the homes of people many of whom are less likely to have a car.

I’ve seen the same thing happen in aviation. Communities with confident voices can get special treatment. And those communities less well-resourced can be more or less sidelined. I think the only explanation why communities in Glasgow – one of the most heavily overflowed cities in Britain – have been ignored by the airport for so long is that the flight paths are over some of the most deprived areas in the country.

My conclusion is not that well-heeled communities should shut up. It is that local authorities and national governments don their headphones, turn up the volume in order to try and hear – and then act on – the complaints, often whispered, from poorer and less well-resourced communities.

John Stewart

WHY DOES THE GREEN MOVEMENT SHOW LITTLE INTEREST IN NOISE?



Noise and green campaigners: different breeds?

There is no getting away from the fact the green movement is pretty silent on noise. A campaign on noise by an environmental NGO is so rare that it stands out. The last national one we remember in the UK was the admirable rural tranquility campaign by the Countryside Charity (CPRE).

Equally, many noise campaigners, lobbyists and noise sufferers are not instinctive environmentalists. Some, indeed, may be actively opposed to some of the environmental and climate change policies advocated by the green movement. Of course, we are the risk of stereo-typing. There are people and organisations which straddle both camps. But they are the exception rather than the rule.

The silence on noise from much of the environmental movement is so profound that it goes beyond the fact that it deprioritizes it in favour of what it sees as more important issues.

It stems from a different mind-set to that of most noise activists. Noise campaigners tend to assess policies and technologies for their noise impact on people; not how they impact the planet. This is a different from the dominant thinking in today's environmental movement.

What drives so many environmentalists is the impact of policies and practices on the planet. They do not see noise as having any lasting impact on the planet. It is therefore outside their framework; outside their terms of reference; beyond the focus of their campaigning or even, in many cases, of their interest.

Noise campaigners are not disinterested in its impact on the planet. In *Why Noise Matters* (1), we devote a chapter to assessing the impact of noise on the planet, and in particular how noise affects mammals and animals.

But for the most part what drives noise campaigners is its impact on people. They are very directly seeking measures which improve what Alex Epstein in his new book, *Fossil Future* (2), calls 'human flourishing'.

There are some areas of overlap: less traffic on our streets; slower speeds; a switch from air to rail for short-distance flights. But this is a marriage of convenience. It doesn't mean noise and green issues 'are in a relationship. Their different mind-sets will not allow that to happen.

References:

(1). *Why Noise Matters*, John Stewart et al, published by Earthscan, 2011

(2). *Fossil Future*, Alex Epstein, published by Penguinrandom, 2022

Why do greens back the noisiest energy source?



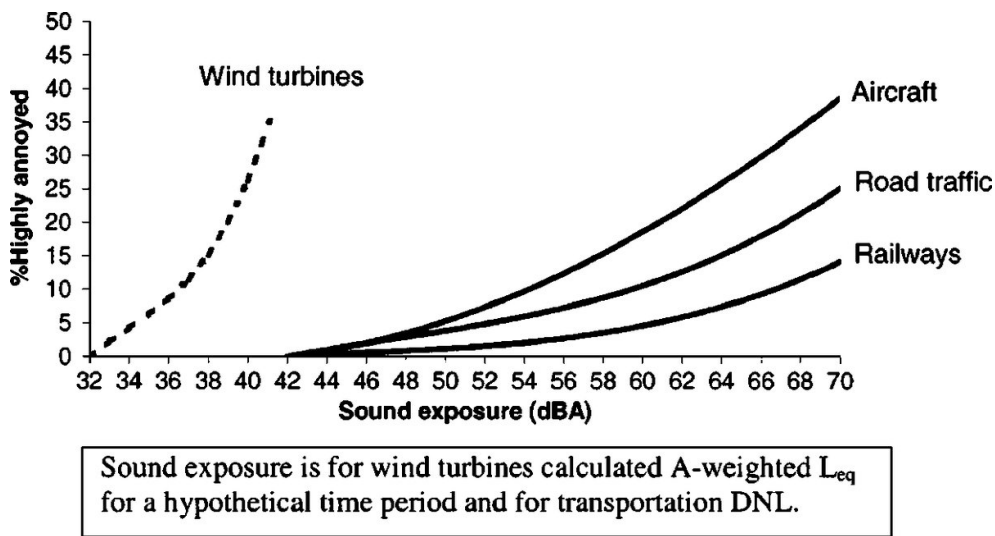
Many greens back wind power yet shy away from nuclear, the quietest form of energy generation. Of course the extraction of oil and gas is hugely noisy but, unlike so many wind turbines, takes place far, far from where people live. The World Health Organisation showed in its recent report that people start to get annoyed by wind turbine noise at lower levels than other sources of noise. This is because of the high content of low-frequency in the noise. And, due very often to the subsidies offered by Governments, far too many cowboys – and in Italy, the Mafia – have become involved in the wind power industry, with little regard to how closely they build turbines to people’s homes. Yet we have not seen the greens tear into this industry. Indeed, some leading members of green NGOs have gone to work for wind power companies.

It has been left to conservationists and noise campaigners to lead the fight against damaging wind farm proposals. Far too many climate campaigners have been willing to overlook the noise impacts of turbines.

And yet many of the same activists are wary of, or opposed to, nuclear power. Nuclear has been a controversial source of energy. There have been concerns around cost and safety. But modern technology is sorting the safety problems and the smaller plants now on the market will cost much less. Nuclear power has been described as “the silent giant of today’s energy system – it runs quietly in the background, capable of delivering immense amounts of power, regardless of weather or season.”

From a noise perspective nuclear is preferable to onshore wind, solar or fracking. Countries such as France or Sweden showed long before climate was on the agenda that nuclear has the potential to be the catalyst for delivering green energy. Surely if you want to ‘Go Green’ your slogan should be ‘Go Nuclear’.

The answer is (not always) blowing in the wind



Wind turbines create noise problems. It is a fact which should never have been in dispute. It only ever was because a rapacious wind power industry, often buoyed by generous subsidies, claimed there was no problem. The World Health Organisation in its latest report (1) has shown quite convincingly that wind turbines cause noise problems. In fact people start to get annoyed at lower levels by wind turbine noise than by any other environmental noise - see chart. This is almost certainly down to the high-level of low-frequency in wind turbine noise.

As early as 2006 we wrote in *Location, Location, Location (2)* about the serious impact wind turbine noise was having on some people. The industry has reluctantly admitted there may be noise problems and is talking about mitigation measures or offering people money who live beside turbines. And some governments are now insisting that turbines can only be built within so many miles from the nearest residential property. Distance can deal with the noise but can struggle with low-frequency noise which can travel further and can penetrate buildings. In any noise audit of new energy sources wind turbines would come close to the bottom of the list.

In the immediate term, all wind turbines which cause people problems should be phased out (with companies compensated if necessary) to allow people who have been damaged by turbines to try and get their life back together again.

We fear what will happen if Labour wins the UK General Election, as it is expected to do. Ed Miliband is likely to head up climate policy. When Labour was last in power, it was his zeal for turbines that resulted in money being thrown at companies to build turbines. With disastrous results for local people. We hope he has learnt his lesson but we fear the worst. At least this time round we won't be taken by surprise.

References:

- (1). http://www.euro.who.int/_data/assets/pdf_file/0008/383921/noise-guidelines-eng.pdf?ua=1
- (2). http://www.ukna.org.uk/uploads/4/1/4/5/41458009/wind_farm_report.pdf

Whisper it, nuclear could provide a near-silent solution....



Nuclear is back. Mini nuclear reactors could be generating power in the UK within a decade. The nuclear industry is confident mini-reactors can compete on price with low-cost renewables.

From a noise perspective nuclear is preferable to solar, fracking and, particularly, onshore wind. The evidence shows that any noise from nuclear plants once they are up and running (they can cause noise to the local community during construction) generates few, if any, noise complaints. By contrast, noise from badly-sited wind turbines can cause severe noise problems. As can fracking (though it can be muted by proper encasing of the plant and by diverting heavy lorries away from local communities).

Small reactors: the future. There have been concerns around cost and safety of nuclear. Much is being done to address these. Although some of the large reactors are still being built, the future is in small reactors (SMRs). The nuclear industry expects that there could be almost 100 SMRs installed across the world by 2030. They will be much more affordable to low-income countries. And costs are likely to fall further as more are installed due to economies of scale. Because of their small size and modularity, SMRs could almost be completely built in a controlled factory setting and installed module by module, improving the level of construction quality and efficiency.

A lot of the research and development into nuclear has been private sector led but, if governments are to give energy subsidies, should it not be to the silent nuclear plants rather than noisy wind turbines?

Jumbo Noise Problem



Thumping, grinding wind turbine noise has always been the elephant in the room for the wind industry.

Now, it's the elephants themselves who've signalled just how annoying low-frequency wind turbine noise is.

Renowned for their acutely sensitive hearing in the lower frequency register, the long-distance communication between Africa's elephants is being drowned out by an increasing number of wind turbines being erected across the African savanna.

Elephants largely use infrasound, the lowest of frequencies, to communicate. They will stamp on the ground and send seismic waves which other elephants can pick up because the soles of their feet have passing corpuscles which act like ground-listening antennae or receptors. Using infrasound, elephants can communicate over distances of 40 kilometres. There is evidence to show that when an elephant is shot in one area, elephant herds 30 to 40 kilometres away become distressed. New research from South Africa shows the impact of wind turbines on elephants.

To listen to an 8 minute interview with the researcher, tune into <https://omny.fm/shows/afternoons-with-pippa-hudson/on-the-couch-acoustic-engineer-sounds-the-alarm-ov>

For more information on the wider topic: <https://stopthesethings.com/2021/06/04/jumbo-noise-problem-africas-elephants-hate-thumping-droning-wind-turbine-noise/>

Noise: The neglected planetary issue of our age?



It is interesting that the threat to the planet's sound systems is silently passing the world by. Though there is concern amongst individuals and some campaigning groups, it has generated nothing to match the vibrant, worldwide movement urging action to stop climate change. The lack of interest is almost certainly a by-product of the way that noise hasn't been regarded as a major pollutant. It still isn't seen as a key problem. But nature is telling us something different. **How long will we remain deaf to its dying call?**

'Man-made' or human induced noise is threatening the planet's natural sound systems. These natural systems, which have evolved over the centuries, are fragile and complex. The sounds of the oceans, the forests, the deserts and the prairies send important signals to marine and wildlife. When human noise distorts or destroys these sounds, the very survival of the species which depend on them can be threatened.

Although there is some evidence of adaptation to new, noisy situations – such as urban birds singing more loudly – there are also signs that human noise has become so intrusive that it is threatening to destroy the delicate balance of nature's sound systems on which so many species depend. As a general rule, the noise impact on marine and wildlife depends on the extent to which noise disrupts a functioning eco-system or a natural sound system.

Noise has the greatest effect on the marine and wildlife which rely most heavily on auditory signals for survival. Increases in background noise levels

can interfere with, or mask, communication signals which animals, birds and mammals use in their daily lives: in courtship, to warn of danger (often critical to survival) or to stake out territory.

The natural sounds of the ocean are magnificent in their range, beautiful in their delivery and stunningly varied. But these sounds are in danger of being overwhelmed by human noises and vibrations as never before in recorded history. It is estimated that during the past 50 years underwater noise has doubled each decade. Scientists and conservationists are increasingly concerned that noise pollution poses a significant threat to whales, dolphins and other marine wildlife.

The sounds of the jungle rival those of the ocean. They are at once beautiful and frightening, awesome and awe-inspiring. But they are under threat. As the jungle is chopped down or invaded, its natural noise rhythms are disappearing. Dr Bernie Krause, the eminent American acoustician who has recorded nature's sounds for the past forty years, estimates that in that time nearly a third of the ecosystems he has captured have become aurally "extinct" because of habitat loss or the presence of noise-making machines .

It is ships which are responsible for the majority of the human-induced noise in the oceans. The noisiest ships are the huge vessels which carry oil, food and manufactured goods between ports all over the world. It is the propellers which are the cause of most of the noise from ships. As the blades turn, they create thousands of tiny bubbles, a process known as 'cavitation'. It is the sound of these bubbles bursting which causes the noise. Ship engines are a distant secondary contributor. Drilling and sonar activities, along with the low-frequency noise from off-shore wind turbines, add to the noise.

We are all familiar with the phrase 'dumb animals'. It comes from the days when we assumed that animals couldn't talk to each other. We now know differently. Dr Bernie Krause, the musician turned acoustician, coined a word for this: biophony. It is what the world sounds like in the absence of humans. It is quite remarkable. Krause has found that animals divide up the acoustic spectrum so they don't interfere with one another's voices. It is like a musical score for an orchestra, with each instrument in its place. No two species are using the same frequency. Krause told *Wired Magazine*: 'That's part of how they co-exist so well.' When they issue mating calls or warning cries, they aren't masked by the noises of other animals. This is best illustrated in the rainforest.

When human noise, what Krause calls anthropony, intrudes on this natural symphony, the information flow of the animal world is disturbed. It is increasingly happening: from cars, lorries, aircraft, logging, drilling, ships, wind turbines. It doesn't take much to disrupt the delicate balance of a natural soundscape.

Adapted from *Why Noise Matters* (2011) by Stewart et al

Not ‘anti-aviation’; but ‘anti-noise’



Aviation is important to the economy.

Aircraft are the work-horses of the globalised economy which has over the last few decades facilitated the trade which has lifted millions of people out of poverty.

Warren East, the chief executive of Rolls Royce, put it like this:

“For thousands of years, the exchange of culture, ideas, goods and services has been the powerhouse of human progress. Aviation has accelerated that exchange across continents, making a huge contribution to humanity and the global economy. International trade is responsible for much of the development and prosperity of the modern world”. Daily Telegraph (4/2/20)

He is correct. Aviation – and the growth of aviation – has a key role to play in enabling that prosperity. This is not to say that it would not be better if a lot of shorter journeys could be made by rail or to argue aviation shouldn't pay more tax. It should. It is under-taxed. It pays no tax on airline fuel and there is no VAT on tickets. But we mustn't kill off aviation. The focus should be on dealing with its downsides.

So, how do we deal with aircraft noise?

1. Research and development into quieter aircraft

Aircraft are a lot less noisy than they were 40 years ago. But in the coming years an annual reduction of only 0.1% is expected in noise from aircraft coming on-stream. The technology is not on the horizon for planes to get significantly quieter anytime soon. Meaningful resources need to be put into research and development into quieter planes by both the industry and governments.

2. Build new airports well away from centres of population

It is interesting there are few noise complaints about the main airports in the Scandinavian countries. They are located well outside the towns and cities. It is not always possible to relocate existing airports but there are lessons here for the emerging economies as they build new airports.

3. Encourage quieter alternatives to air travel where feasible

Aviation does long-distance journeys well but, if rail became more viable for shorter journeys, it opens up the possibility of managing or even reducing flight numbers over many communities (which is what they want above all else).

4. Share the noise around

Except for areas under the final approach to a runway, it is possible to use the new satellite-based technology to create rotating flight paths to give residents a break from the noise each day. In our experience, communities are much less interested in how many runways an airport has than in how many planes fly over their homes. It is the volume of aircraft passing overhead rather than the noise of each plane that is the biggest cause of disturbance.

5. Introduce a numbers cap or a noise cap

The industry favours a noise cap as it can incentivise airlines to use less noisy planes. Communities like a numbers cap as it brings more certainty. If a cap (on noise or numbers) is imposed, it might be most effective as a cap over particular communities, not one covering the whole airport, for what is critical to people is the impact on their community. If an airport wanted to raise the cap, it would need to convince the relevant planning body the noise impacts would be acceptable.

6. Limit night flights

Few flights need to fly at night. Night flying should become the exception.

7. Provide generous compensation and mitigation

Communities under flight paths should expect money to pay for effective sound insulation measures. People who lose their homes or who see them devalued in price should be properly compensated. Wherever a new airport is built people who lose their homes or land should be generously compensated.

8. Ensure best operational procedures are followed

The steepness of the descent or ascent is important for communities as are measures such as the point aircraft coming into land lower their landing gear.

These measures would quite noticeably lower the impact of noise without harming an important industry.

'Degrowth' is not the way forward for aviation



I simply don't buy the argument that 'degrowth' is the way forward for aviation. Indeed, i believe it is positively harmful. Implemented, it would take away any chance of millions of people across the world climbing out of poverty and getting a better standard of living. Degrowth has been described thus:

"Degrowth is about much more than just a simple decrease in consumption, living standards or material throughput of the economy. The concept also encompasses a critique of the whole modern culture of development, that is, a belief that more is always better. A core concept is sufficiency"

Tell that to the family in Africa on the breadline, desperate to make ends meet. Tell that to my facebook friends from Uganda who are keen to learn and better themselves but who are struggling just to pay the school fees.

Bjorn Lomborg, the Danish author of *The Skeptical Environmentalist*, wrote this last year:

"The most powerful thing governments could do to transform lives would cost next to nothing at all: embrace freer trade. During the past 25 years, China lifted 680 million people out of poverty through trade, and there are similar stories from Indonesia, Chile and others. Genuine, global free trade would have benefits that would reach every single country."(1)

A growing and successful aviation industry is critical to delivering free trade in a globalised world.

I would ask anybody who backs the degrowth of aviation to read this article: <https://www.citylab.com/transportation/2017/11/why-is-african-air-travel-so-terrible/546422/>

It argues that “the largely empty African skies have a tangible economic impact on the people below”; that the economies of the planet’s poorest continent are missing out on more than a billion dollars in possible growth because of poor air connections. Africa needs better air links; more airports; lower fares.

The adverse impacts of such expansion would be on people’s land required for new airports and around the noise communities would experience. There have been horror stories across the world of people’s lands and homes being seized with little or no compensation. And the noise from the planes will be a huge problem for people who haven’t experienced it before.

The answer must be to ensure people who lose their land get generous compensation and to build the airports as far away from populated areas as possible; to buy out, at a fair price, anybody still impacted by the noise; and to factor in operational measures which benefits communities, such as respite, from the start.

These are the issues we should we should be concentrating on; not whether or not ‘degrowth’ is a good thing.

(1). <https://www.lomborg.com/news/how-to-spend-162bn-to-fix-climate-along-with-everything-else>

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