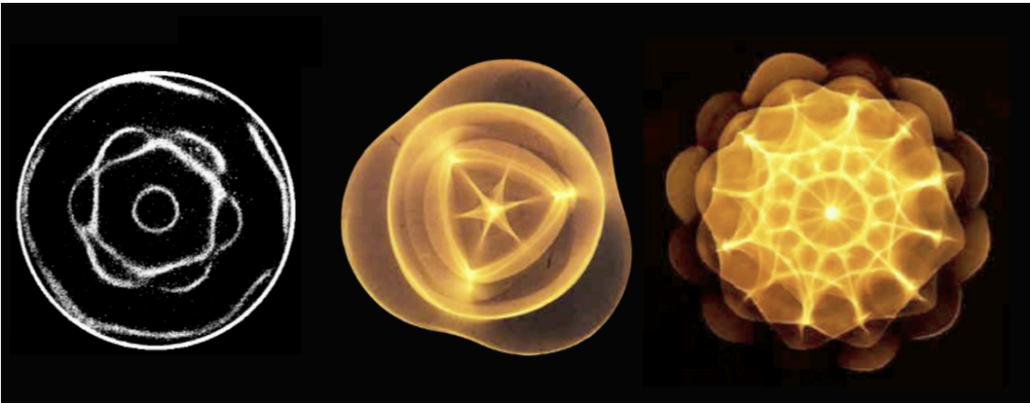




Atoms vibrate – every part of you is vibrating
Molecules vibrate



Entrainment – process of a small rhythm being attracted to fall into step with a larger rhythm. Whatever the larger rhythm is, it'll train the smaller rhythm to fall into step with it.

Resonance and entrainment are two of the ways in which sound is powerfully acting on you the whole time.



your amazing ears



They all filter our reality and also define what Noise is to us.

So my noise may not be your noise. Noise is simply unwanted sound, and it's a pretty personal thing. Yes, some sounds would universally be considered to be noise.

However, there will be sounds that you find unpleasant, that I find pleasant and vice versa, particularly when it comes to music. One person's joy is another person's noise. So noise is something we need to consider. And I'd like to look at noise in detail now because noise is affecting us the whole time.

Noise

According to the European Union (EU):

- about 40% of the population in EU countries is exposed to road traffic noise at levels exceeding 55 dB(A);
- 20% is exposed to levels exceeding 65 dB(A) during the daytime; and
- more than 30% is exposed to levels exceeding 55 dB(A) at night.

According to the European Union (EU):

- about **200 million people** EU countries is exposed to road traffic noise at levels exceeding 55 dB(A);
- **100 million** to levels exceeding 65 dB(A) during the daytime; and
- more than **150 million** to levels exceeding 55 dB(A) at night.

Noise has negative impacts on cognitive performance. For recall and reading, a reduction of the day and night noise level by 5 dB(A) within the range of 65–80 dB(A) was shown to improve performance by almost 10%. For attention and memory, a 5 dB(A) reduction in average noise level results in approximately 2–3% improvement of performance. These **adverse impacts of noise on cognitive performance can lead to a reduction in the productivity at work and the learning performance at school.**

Children chronically exposed to loud noise show impairments in attention, memory, problem-solving ability and learning to read.

Classical biological risk factors have been shown to be elevated in subjects that were exposed to high levels of noise. In the past several years, epidemiological evidence has been accumulated supporting the hypothesis that **persistent noise stress increases the risk of cardiovascular disorders including hypertension and ischaemic heart disease...**

Preliminary results of a multinational pilot project estimating the environmental burden of disease (EBD) in Europe have shown that the **EBD for noise is second in magnitude only to that from air pollution...**

An international study, coordinated by WHO/Europe and supported by the European Commission's Joint Research Centre (JRC), estimated that **traffic-related noise accounts for over 1 million healthy years of life lost annually** to ill health, disability or early death in western European countries.



Master of Sound™

Accuracy

Noise distractions substantially increase dispensing errors

Create a Hospitable Indoor Climate
Wayne Morgan Caverly
Pharmacy Post September 2000



Noise levels in hospitals and healthcare facilities have doubled since 1972

Source: David M. Sykes
ANSI S12 Work Group 44
May 21 2009

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Recovery

Sleep is compromised by noise





65 dB

“The Environmental Council is of the opinion that the results show a consistent trend. The threshold level for **possible noise-induced risk of myocardial infarction** has been established at a daytime immission level of 65 dB(A).”

*Health effects caused by noise : Evidence in the literature from the past 25 years
H Ising, B Kruppa Noise & Health 2004 Volume 6 Issue 22 Page 5-13*

Take Control

get protected



Walk away or complain

Office noise can reduce your productivity by two thirds

Triple your productivity!
Highest quality you can afford
Active noise cancelling
or noise isolating
Low density sound



Master of Sound™



Master of Sound™



If you run an office, really, you need to go into every room and ask yourself, is this fit for purpose? Because sound and communication is so much more important than vision.

You can shut your eyes right now and still receive exactly what I'm sending to you, on the other hand. That's not so good, is it? So **let's get the sound right in our offices to encourage maximum productivity**

Provide quiet working space – do let people wear headphones if they want to and encourage them to use stochastic natural sound in the headphones to improve their productivity so they don't have to listen to the conversations around them when they're trying to think.

And at home we have interior designers. Where are the interior sound designers? Have you thought about designing the sound in every room in your house, for example, so that in each room you ask the question, **is this soundscape supportive, appropriate, effective?**

The issue which I tried to get across all the time, and mainly to architects, is that we need to design not just appearance, but also experience in all the senses. Every one of our buildings should be designed to work in all the senses and particularly in sound.

Music



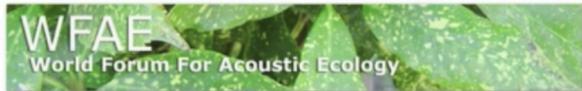
sodcasting



Let's be considerate about the sound we make for other people. Let's cherish music for what it really is, which is something to be listened to. And let's start to think about **designing our environments to be appropriate and effective.**



Pushing back



Healing



Silence is a wonderful sound and we should all have at least three minutes a day of it, if possible. But if you want to seek out sounds which will nourish you in some ways, wind, water and birds are great ways to go.

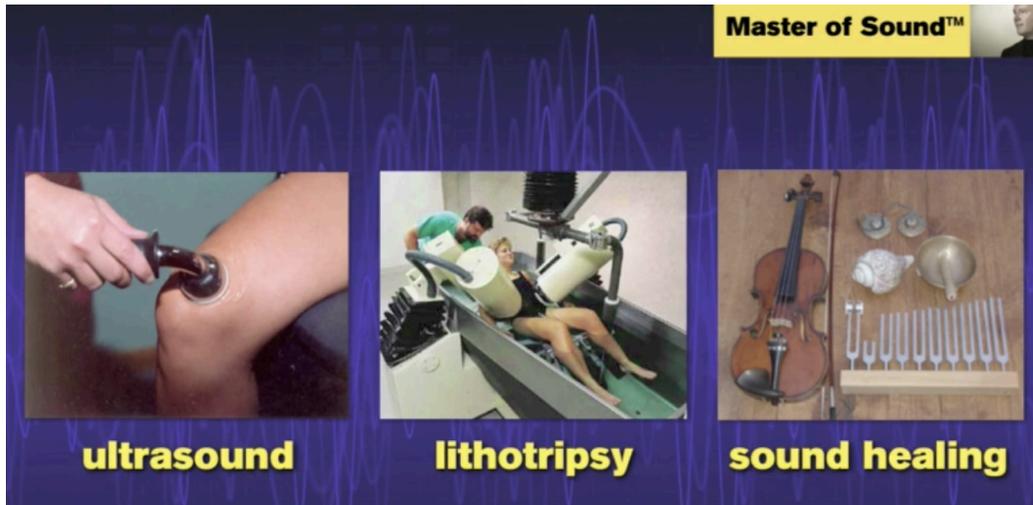
You can get recordings of them, can play them on your stereo or on loudspeakers, and they can really do you a great deal of good.



Master of Sound™

the power of intention

Sound intention is very important. So when you set a sound out with an intention, it can have a high impact, this is like music with the intention of being listened to.



Master of Sound™

ultrasound **lithotripsy** **sound healing**



Master of Sound™

listening **making**

To enhance your health with sounds:

- Listening – If you've done the conscious listening course, you'll know how important that is for understanding, for communication and also for health, because if you're listening, you're connected with the world and you feel more present and it's good for you to feel like that.
- Making Sound – take up an instrument. Do you know the research shows musicians live longer and musicians have bigger brains?
- If you can't, if you don't want to play piano or guitar or something like that, do something simpler.
- We can all sing, it's a myth that people can't sing.

It's good for your health. It's good for your intellect. It's good for all parts of you.



Soundscaping

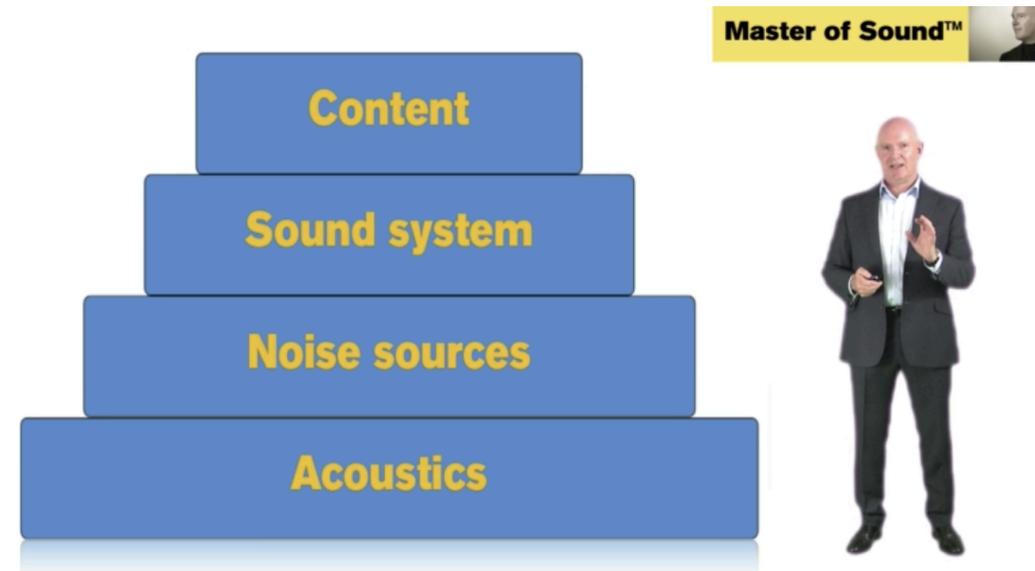
Soundscaping – designing sound around us for healthy outcomes.

Designing sound for best effect so that we're nourished and supported by the sound around us and we're controlling it and responsible for it instead of just a victim of noise.

It's important to understand that your sound can be somebody else's noise and vice versa. So we need to be considerate as a society in order to create soundscapes which are appropriate and effective because they all overlap. It's not just me making a soundscape that's kind of an eggshell that you don't get to experience.

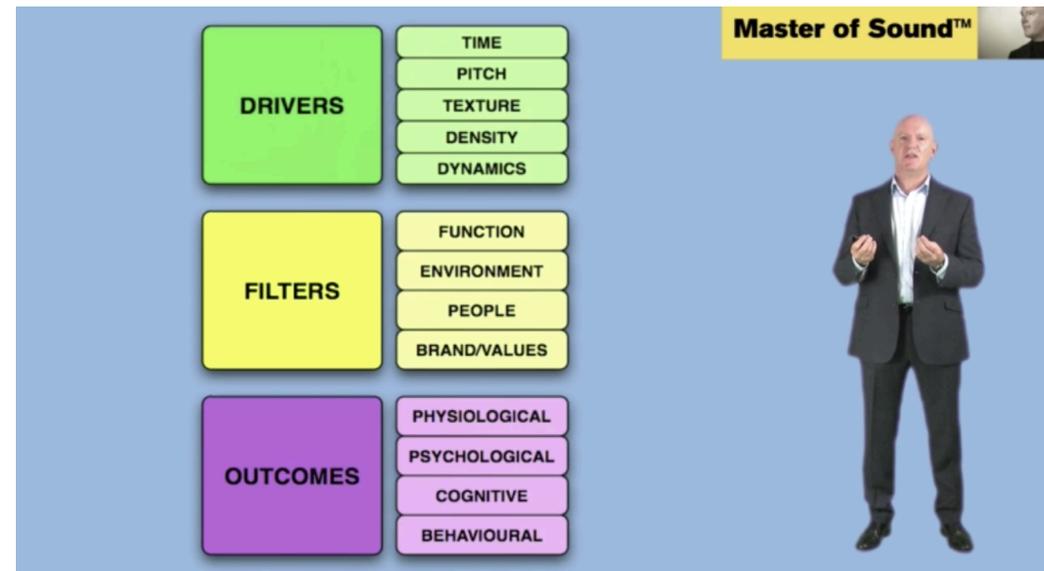
**Take control
of your sound**

So the message really is to take control of your sound starts with listening, and then it's your intention to produce a soundscape that's effective for you and ecologically good. Good for the planet. Good for the people around you.



4 building blocks to designing soundscapes

Aim for something like 45 or 50 decibels. That's very quiet. That'll work nicely. Older equipment probably is more like 60 decibels. That's pretty noisy. Remember, every increase of 10 decibels is like a doubling in our perceived noise level.



BAA | Glasgow Airport

Master of Sound™

**Target:
reduce stress**

**Generative
soundscape**

**Retail sales
increased by 3-10%**

Master of Sound™

**creativity,
communication,
education, health,
exercise, work,
sleep, meditation,
relaxation, babies,
dinner, romance, sex**

BP | service stations

**Five star
bathrooms**

**Generative
birdsong**

**Customer satisfaction
increased by 50%**

Master of Sound™

**conscious
listening**

**conscious
creating**

beautiful

Your takeaways



- 1 Noise hurts
- 2 The importance of soundscaping
- 3 How to do it
- 4 Sound that will help



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