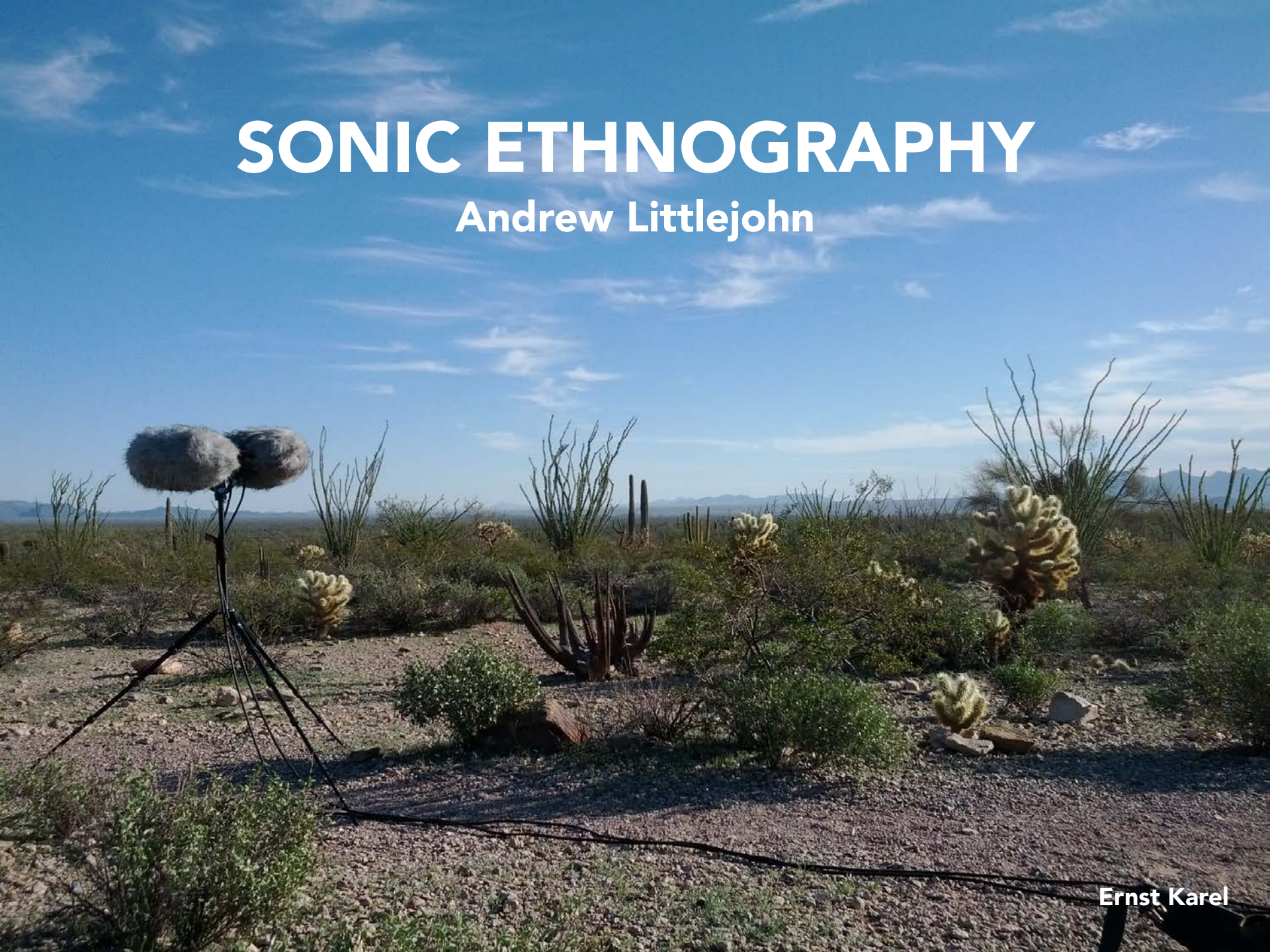
SONIC ETHNOGRAPHY

Andrew Littlejohn



Ernst Karel

Three Assumptions

- Societies (co)create soundscapes
- How they “listen” to them is socially constructed
- This “listening” informs other domains of social life

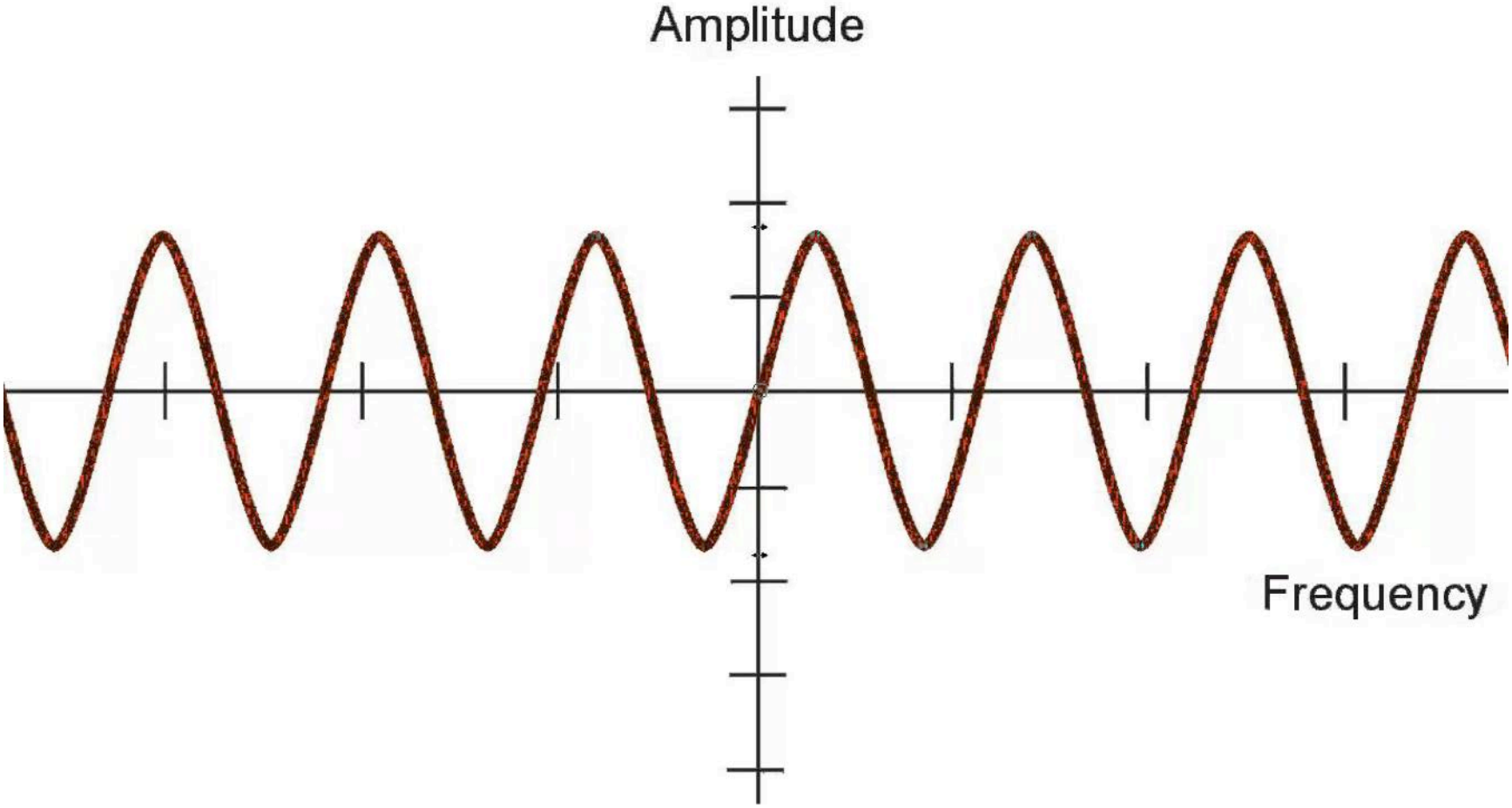
Always remember…

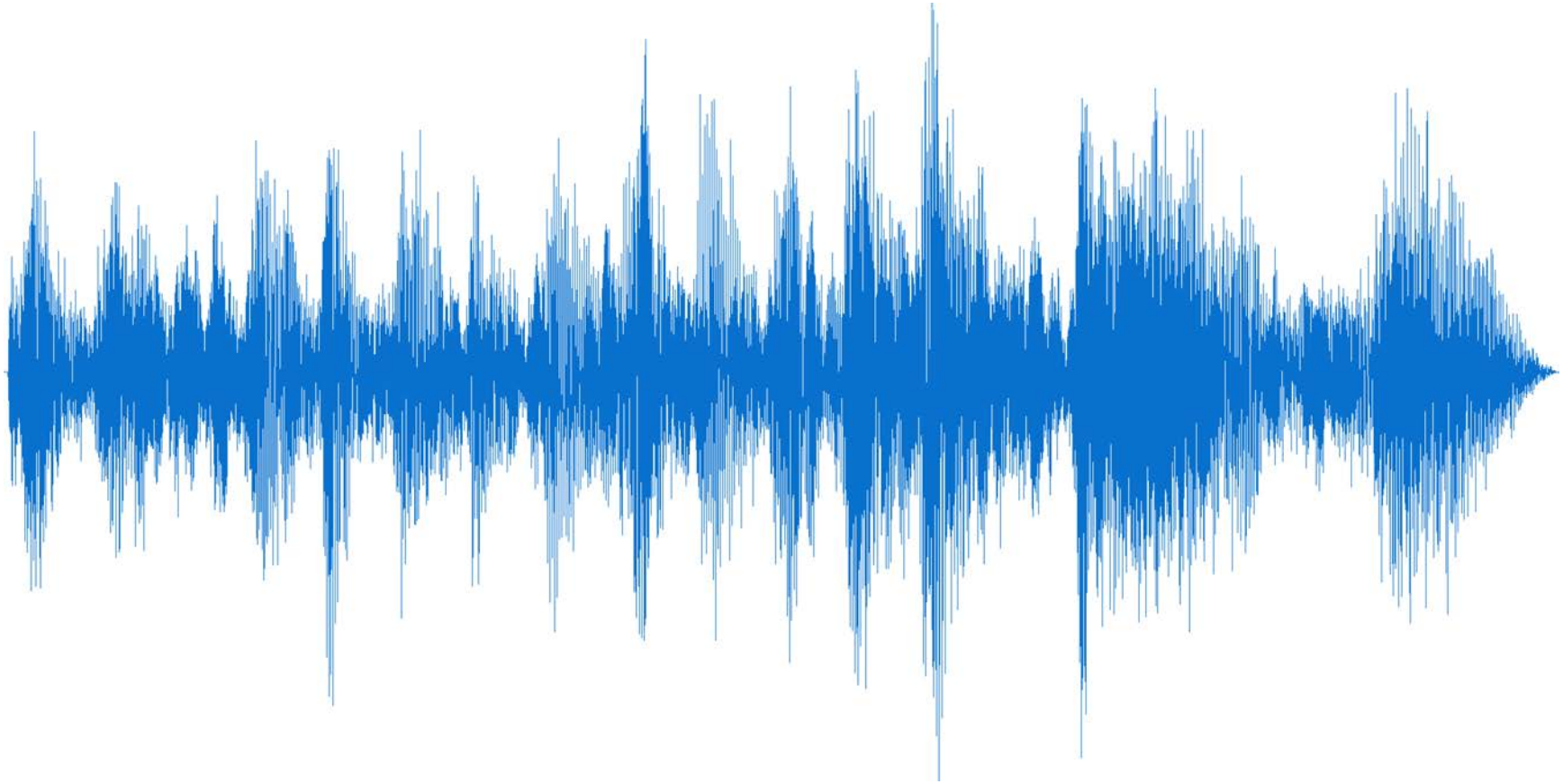
Garbage in, garbage out!

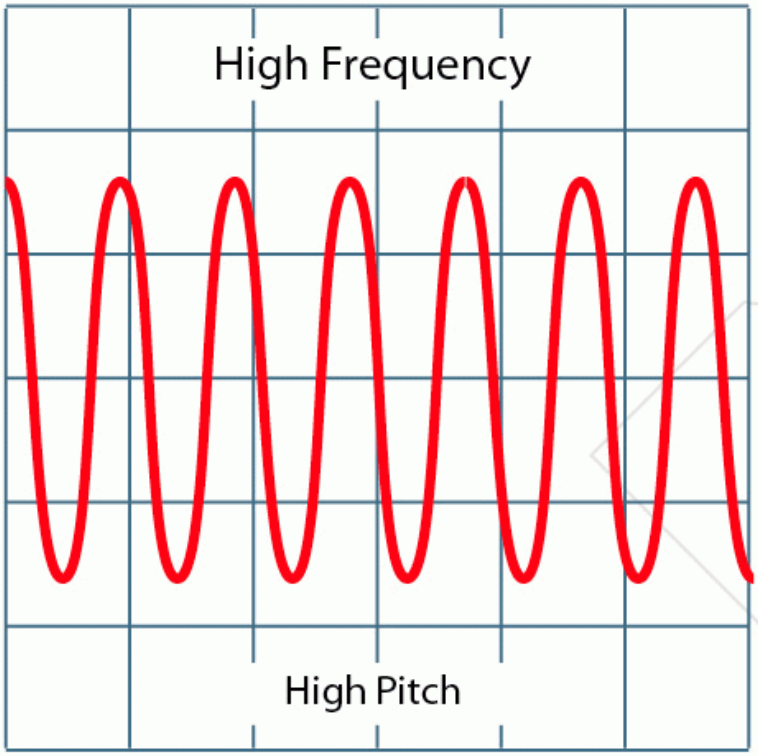
- Setting “sample rate” & “bit depth”
- How sound works: amplitude versus frequency
- How your microphone works

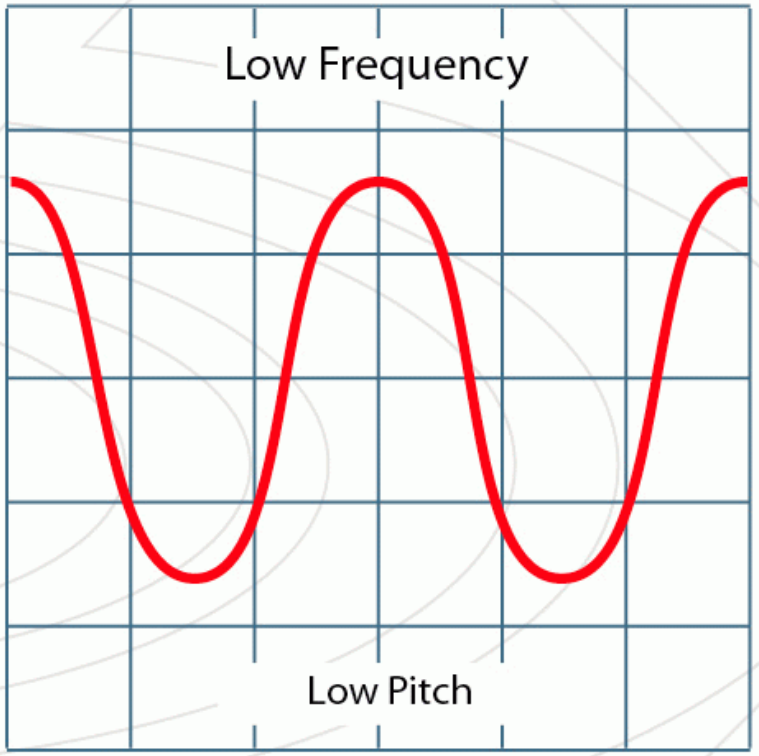
Sample Rate & Bit Depth

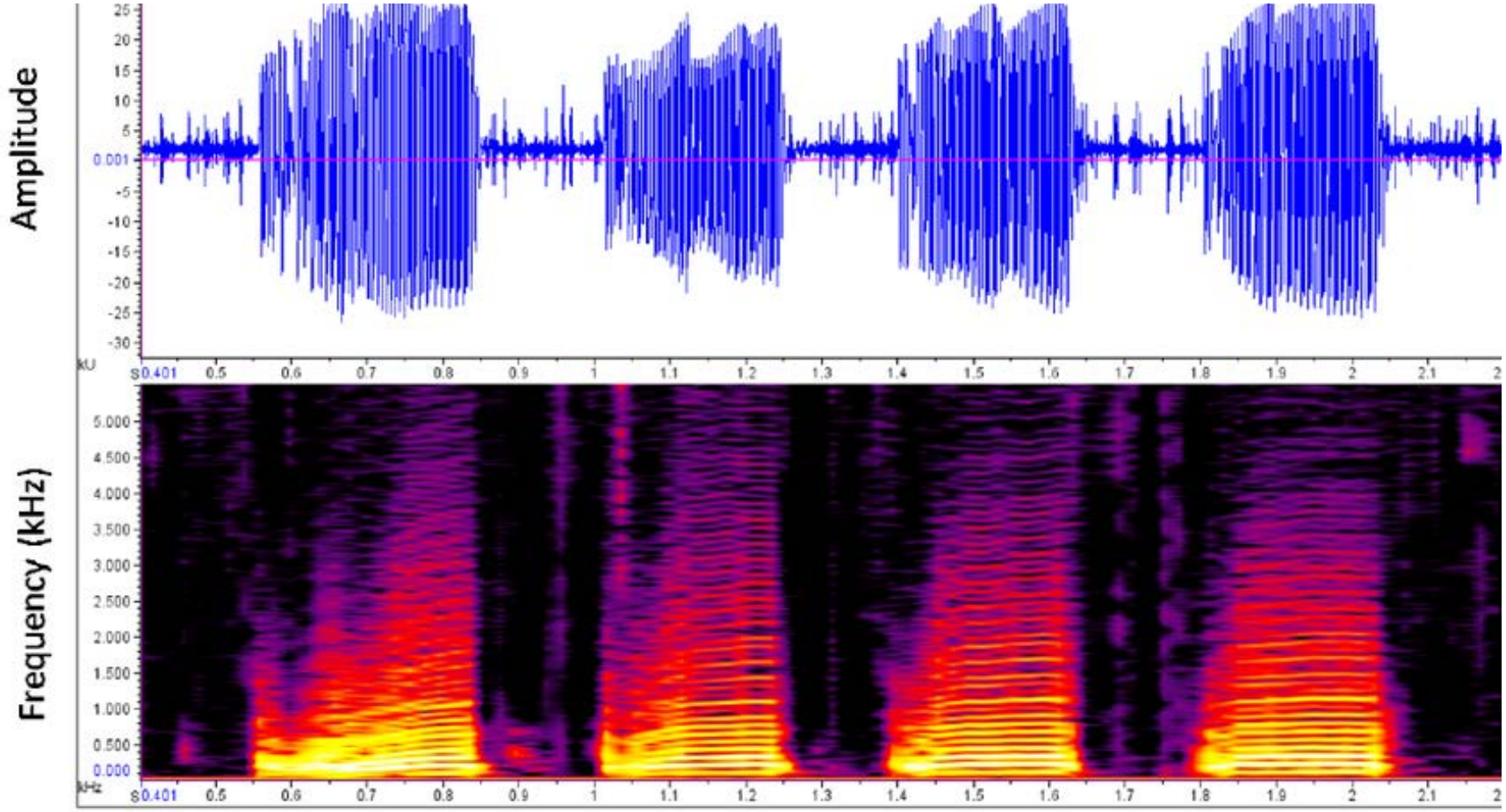
- Sample Rate (like shutter speed)
  - 44.1kHz (cd) or 48kHz (film)
- Bit Depth (like resolution, affects dynamic range)
  - 24-bit


Amplitude
Frequency



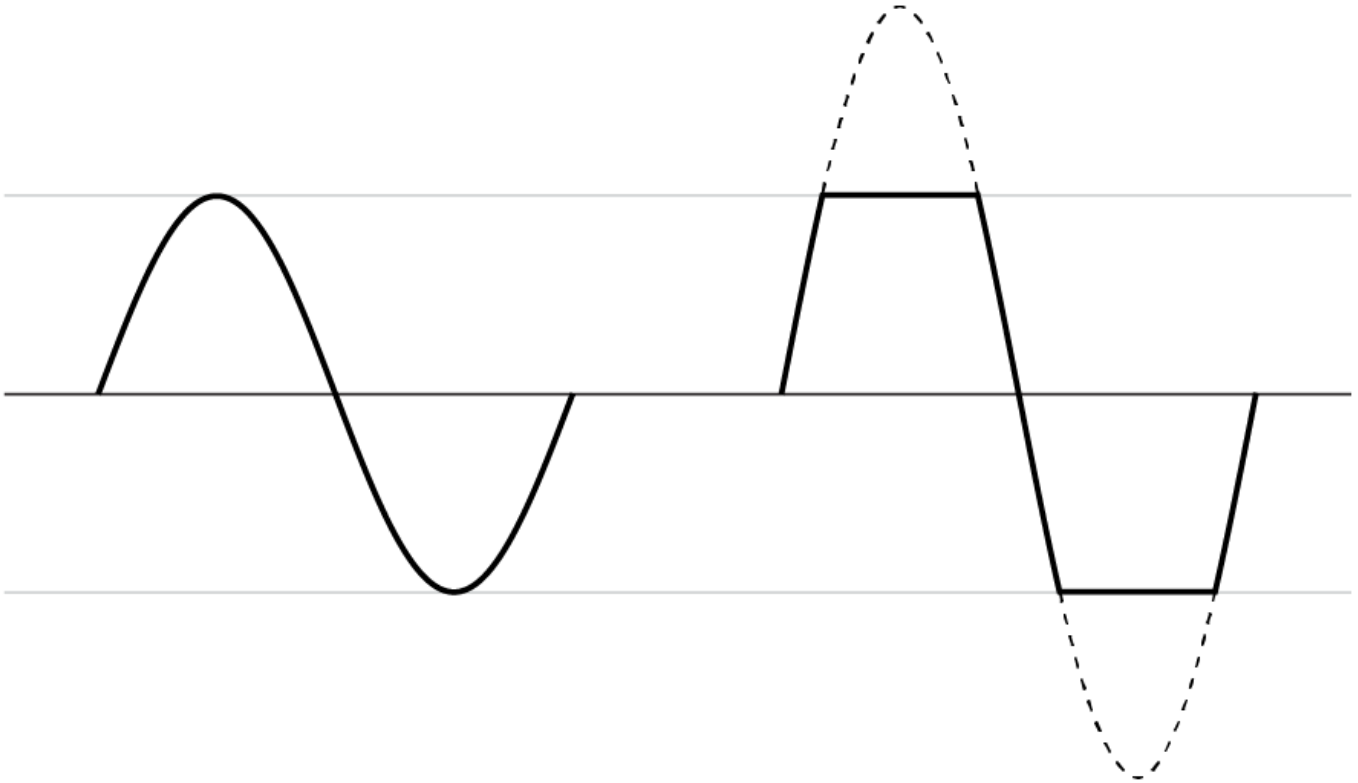

High Frequency
High Pitch


Low Frequency
Low Pitch

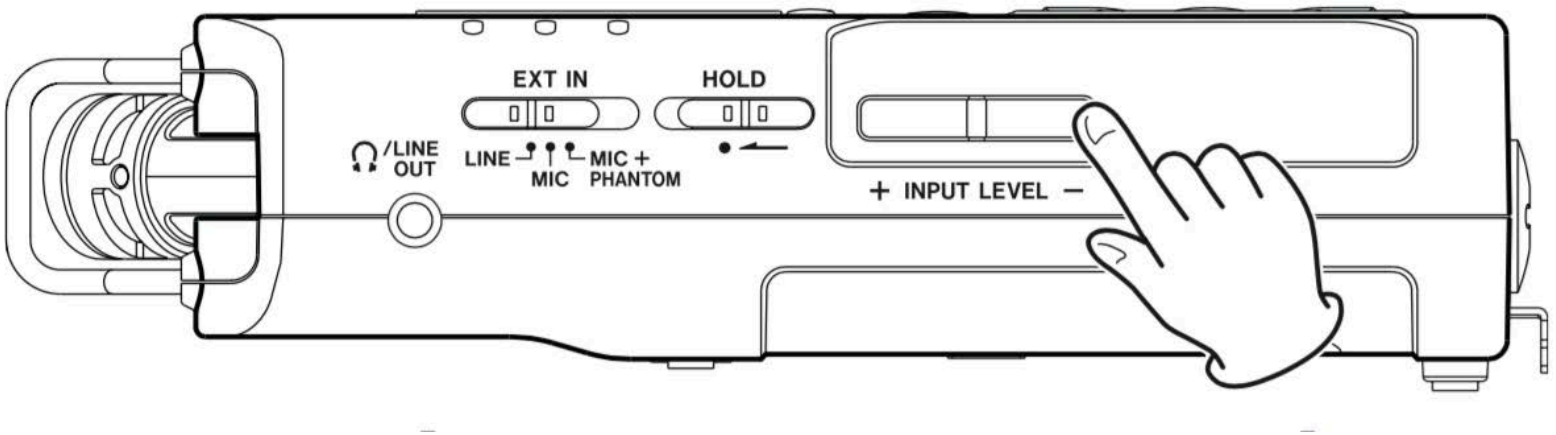

Amplitude
Frequency (kHz)
25
20
15
10
5
0.001
-5
-10
-15
-20
-25
-30
kU
S 0.401
0.5
0.6
0.7
0.8
0.9
1
1.1
1.2
1.3
1.4
1.5
1.6
1.7
1.8
1.9
2
2.1
5.000
4.500
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
kHz

Why Amplitude Matters

- Too high: Clipping
- Too low: Noise



Controlling Input: Setting Levels



Caution!

Don’t “ride the levels” *during* the event you are trying to record!

Beware of handling noise!

Don’t go low!

Caution!

Never use auto levels

The Sweet Spot

-12 dB or so

Controlling Amplitude

- Limiting

Using a limiter

Press the QUICK button.
The Quick menu screen will appear.

Use the + or – button to select (highlight) LEVEL CTRL**, and press the ENTER/MARK button.**
The level control setting screen will appear.

Using a limiter

Options: OFF (default), PEAK REDUCTION, AUTO LEVEL, LIMITER

Use the + or – button to select (highlight) a mode, and press the ENTER button to enable the mode and return to the recording screen.

The selected mode is shown with an icon in the recording screen.

Caution!

Do not use a limiter unless you need to:
focus on manually setting levels correctly

Why Frequency Matters

- Low or high frequency disturbances ("noise")
  - Wind
  - Machines
  - …

Setting a low-cut filter

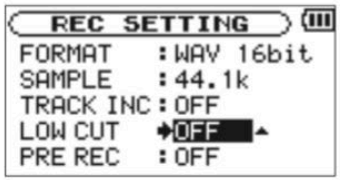
Setting the low cut filter

The low cut filter can reduce noise such as offensive wind noise from air-conditioners and projectors.

1 **Press the MENU button to open the MENU Screen.**

2 **Use the + or – button to select REC SETTING, and press the ENTER/MARK or ►►I button.**
REC SETTING screen appears.

3 **Use the + or – button to select LOW CUT, and press the ENTER/MARK or ►►I button.**

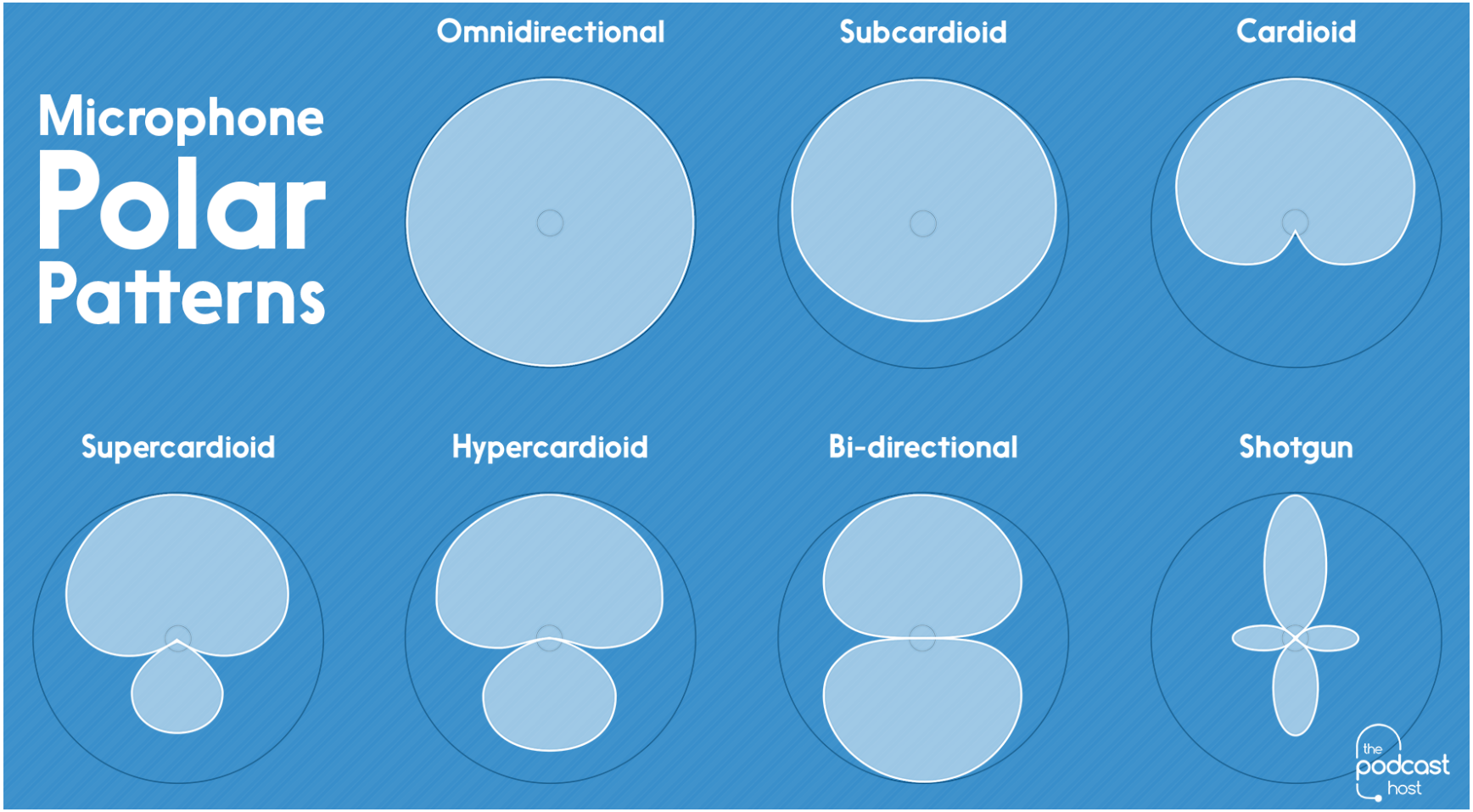


4 **Use the + or – button to select the cut off frequency of the low cut filter for mic input.**
Options: OFF (default), 40Hz, 80Hz, 120Hz

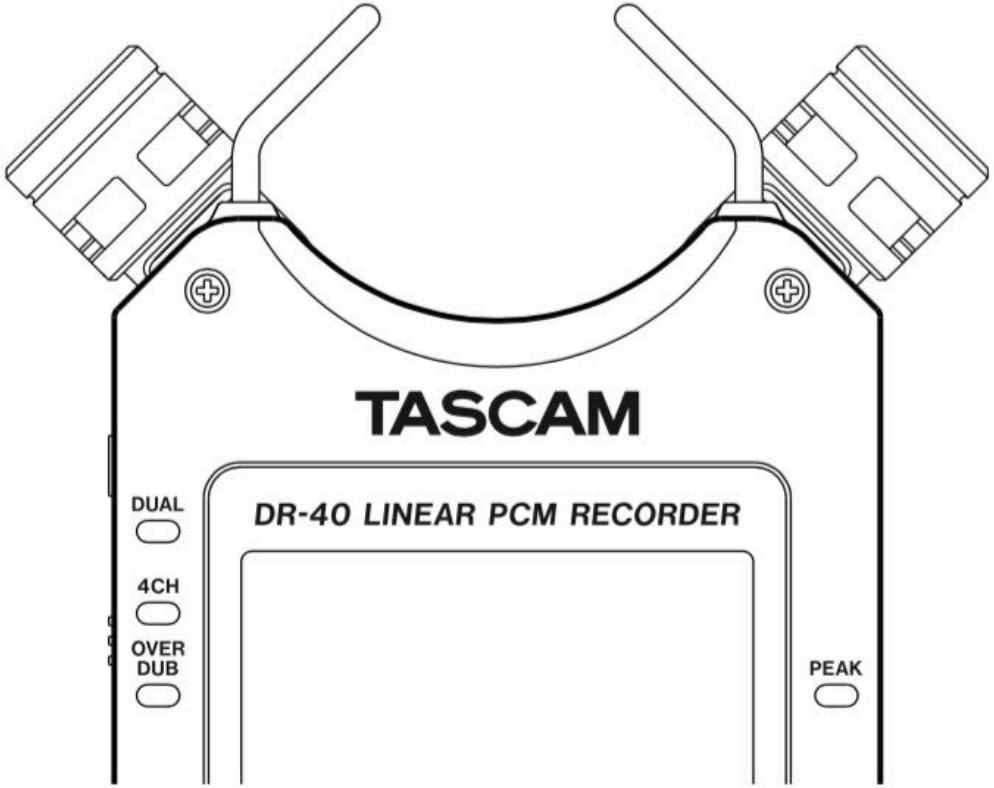
Caution!

Choosing 80/120hz could affect speech/song

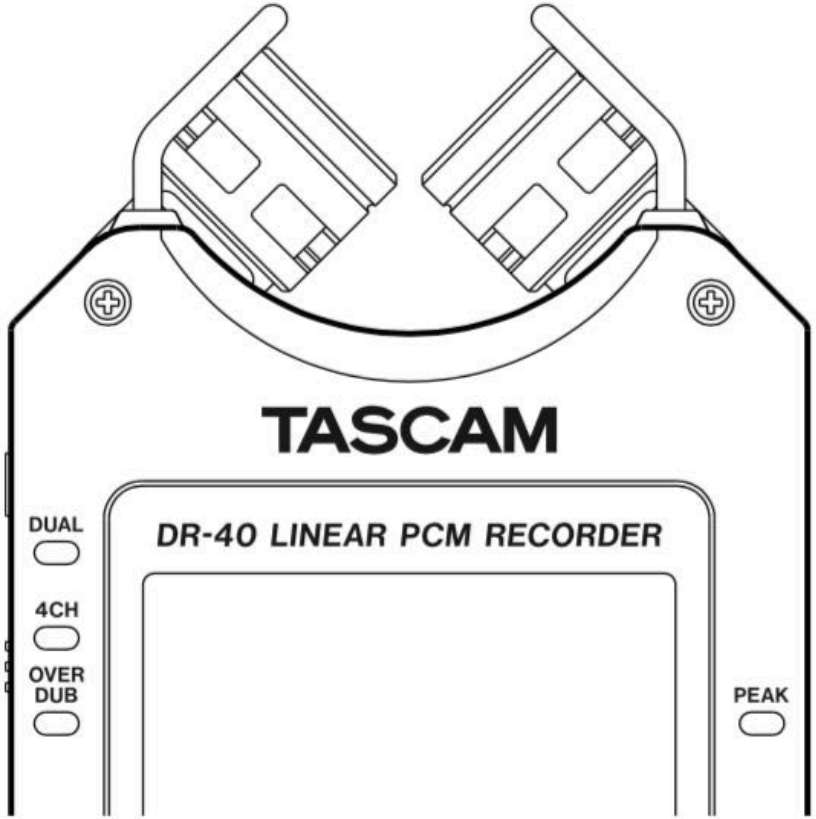
How Your Microphone Hears



X-Y Position



A-B Position



Caution!

If you want to reject as much environmental sound as possible, get as close to your subjects as you can

(see also comments on levels & noise)

Parameters

Can you think of any?

indoor
outdoor

private
public

participatory
observational

close
distant

fixed position
moving through space

short
long

single-pointed
undirected

loud
quiet

unchanging
dynamic

ongoing
intermittent

low frequencies
high frequencies

beautiful
unpleasant

recognizable
unrecognizable

legible
illegible

staged
spontaneous

Deep listening – In your chosen field site, spend an hour or so listening, first through your ears and then through the microphone without actually recording. Next, record for no more than one hour, using the list of parameters discussed in the tutorial and Pisaro's Framing Considerations to guide you formally. You may make recordings in a single space, or across two different spaces within the site. From this material, edit a soundscape of no more than 3-4 minutes conveying something about how you experienced the site. For those using recordings from two spaces, you may clearly distinguish or mix the two for specific effect. You must include both loud and quiet, "soft focus" ambiances and discrete sonic events, wide and close "shots", etc. For this part of the exercise, use only the hand-held stereo recorder.

Interview – Make a 10-20-minute interview in situ with one or more informants about the sounds of your field site, and then edit this into a 2-4-minute piece. What do your informant(s) pay attention to, and what do they ignore? How does sound affect their experience of the place, positively, negatively, or functionally? What sounds, for them, define the place itself? For this interview, use only the external mono mic. Don't forget to record some "room tone" (or, if outside, static ambiance) to aid you in the editing process.

Directed Listening – After recording the interview, re-explore your field site, using the hand-held stereo microphone to record specific sounds/ambiances mentioned by your subjects. As with the first exercise, use the list of parameters and Pisaro's Framing Considerations to structure your approach, recording both loud and quiet, close and wide-angle, sharp and soft focus "shots". From no more than 1 hour of total material, edit a 3-4-minute soundscape representing the space as experienced by your subjects. Once you have completed the three exercises, export them as a single file with the following order: exercise 1, exercise 3, exercise 2. This is to ensure that your peer reviewers hear both soundscapes before they listen to the interview.