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Sound and motion analysis

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“Music may be as much a motor event as a sonic event, as well as, of course, a social fact. ”

–John Baily, 1985, p. 258

MOOC - Week 2

- Perception as an active process
 - *Affordances*
- Sound-producing actions
 - *Impulsive, sustained and iterative*
- Qualitative motion analysis
 - *Labanotation and Laban Movement Analysis (LMA)*
- Sound analysis
 - *Waveform, spectrum and spectrogram*

- Sound-producing actions — perception
 - Motor-theory of perception
 - Air instruments
- Action-Sound relationship
 - Impulsive, sustained and iterative
- Gestural affordances

Laban's Movement Analysis (LMA)

Effort

Space:	Direct	—————	Indirect
Time:	Sustained	—————	Sudden
Weight:	Light	—————	Strong
Flow:	Free	—————	Bound

Sound analysis

- Verbal descriptions (subjective)

Groovy, happy, noisy, warm...

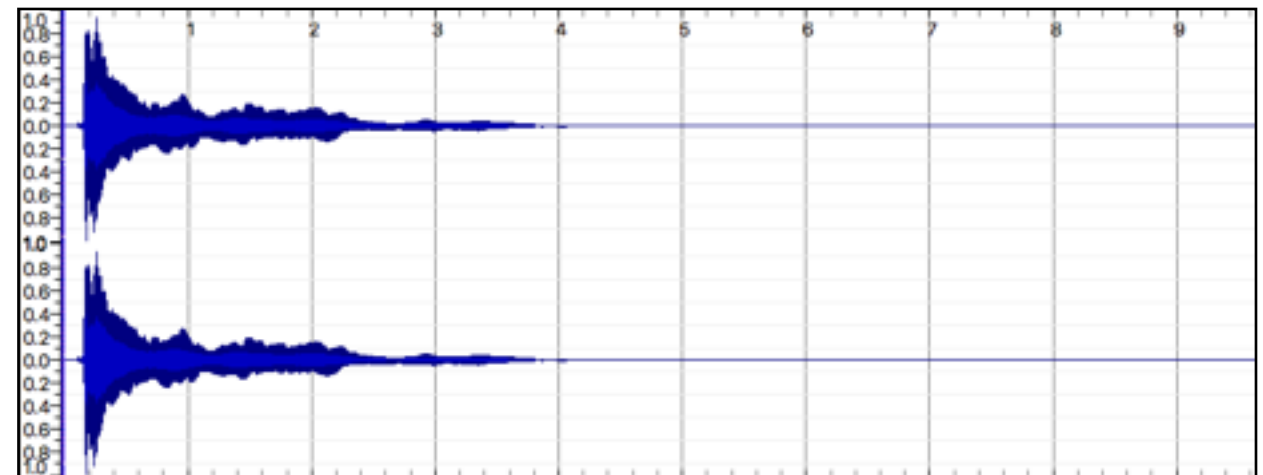
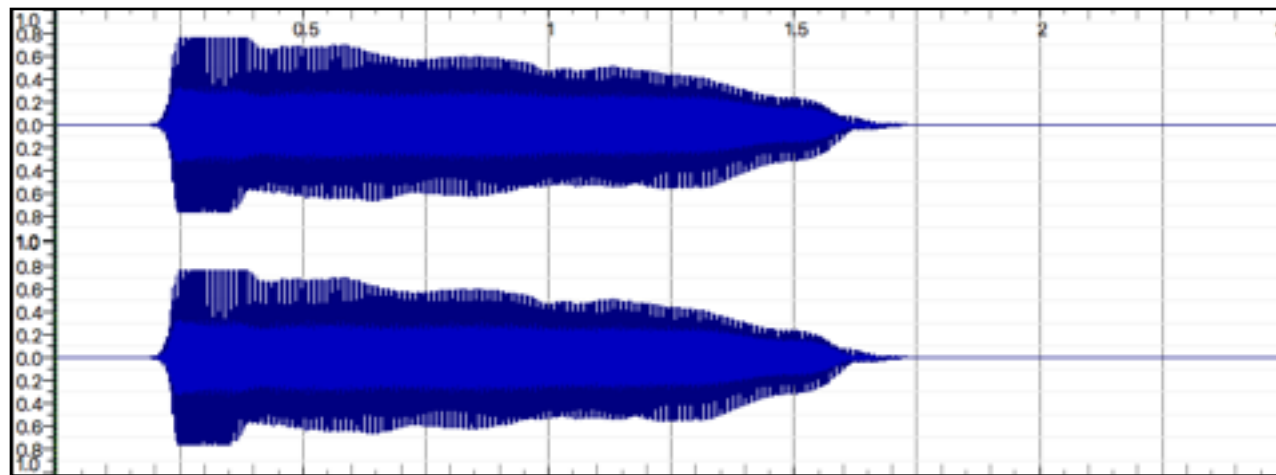
- The sound signal

Waveform

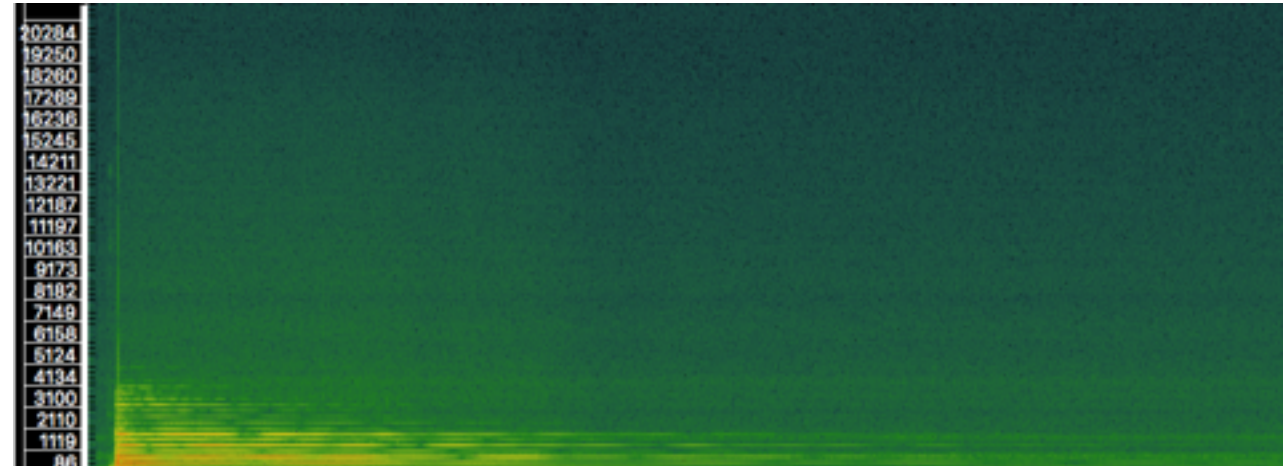
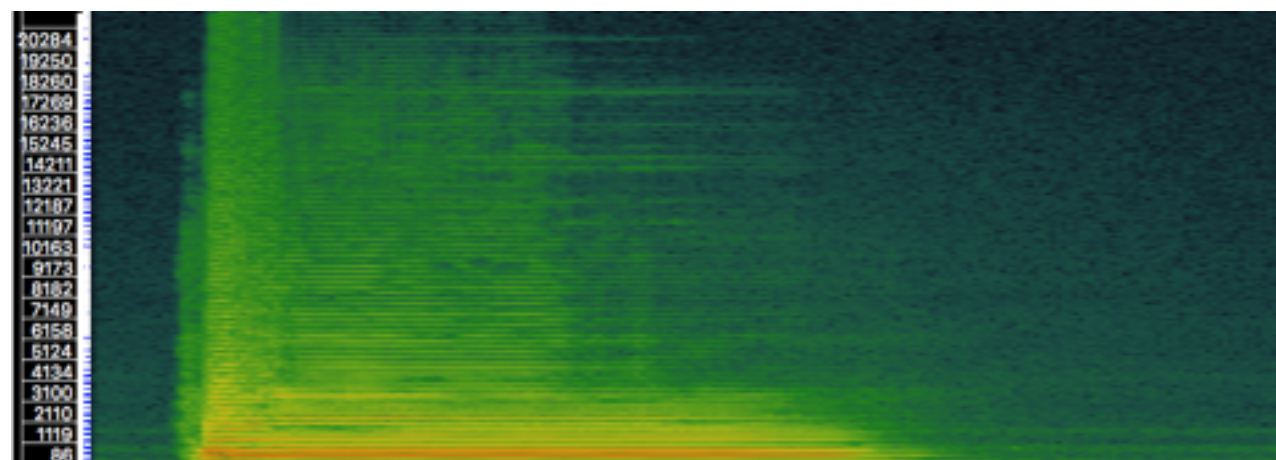
Spectrogram

Sonic Visualiser

Waveform

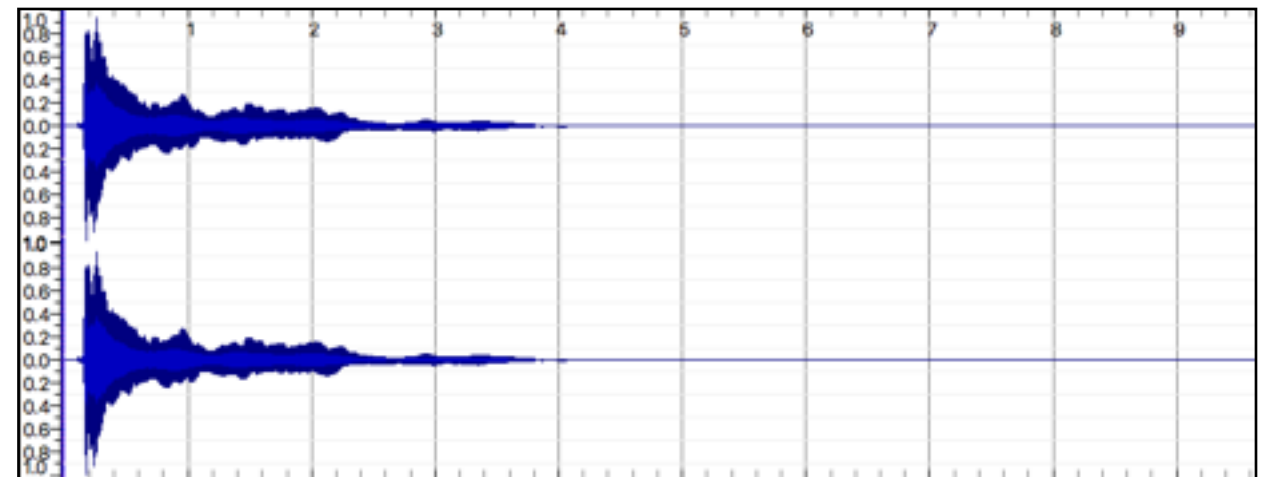
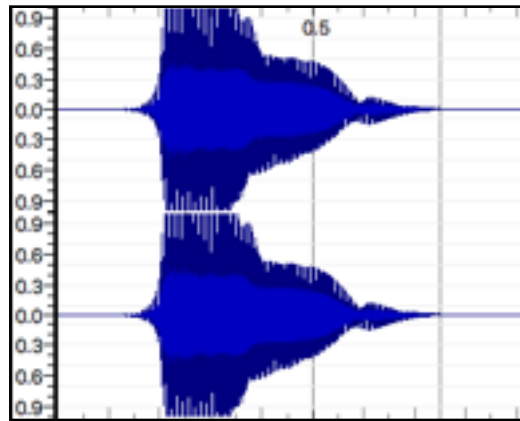


Spectrogram

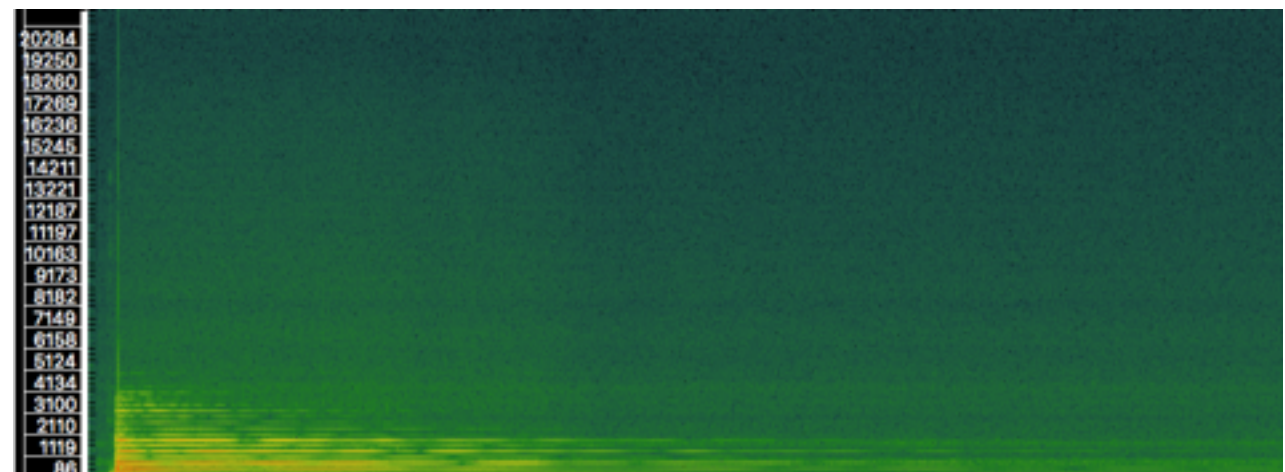
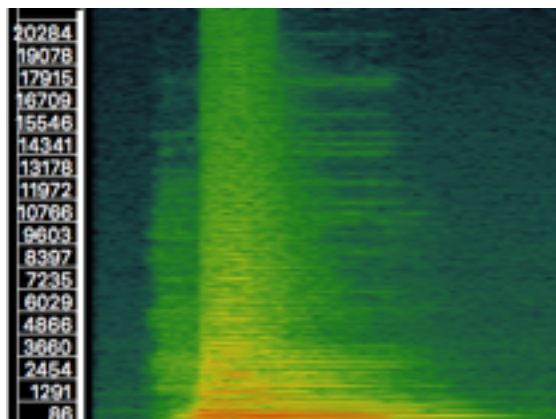


Sonic Visualiser

Waveform



Spectrogram



Use what you know about music-related motions and gestural affordances to create a short piece of music that is to be communicated only through sound and motion.

- Pitch?
- Rhythm?
- Timbre?
- Sound producing gestures?
- Action—sound types?