

SURFACE RESONANCE

Phase 1

Table overview

Time/Work	Findings, focus, key directions	Findings against principal research aims			
		Abstraction of 'riddim'	Low frequency sound activating spaces	Tactile system as an instrument	The dialogue between hearing and sensation

Max/MSP, trying to dissect and reproduce vibration sounds

Understanding the physics of surface resonance

Consulting with acousticians
 Programming building blocks to emulate vibration
 Trying different synthesis approaches
 Massive time and technical challenge

Field recordings - vibrations from nightclubs

Discover that field recordings give a too explicit, musical reference

Realising the sonic complexity of resonant surfaces, too difficult to model

Begin to understand the complexity in recording vibration

Recordings intended to be used in composition
 Aiming to understand and highlight the nature of musical vibration

Field recordings, atmospheric low frequency sound

Furthering my understanding of the sound/vibration relationship and characteristics

Finding locations where low frequency sound was a dominant characteristic
 Trying to express the natural potential of vibration to occur, given the right intensity of stimulus

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Exciting vibration in a space, large PA

To create the effect of musical vibration without the direct and obvious sound of a musical source

Considering how reliant the low frequency sound effect is on having a large system - does not translate on recording

Use of effects to blur sense of riddim

Effects to emulate the natural abstraction of LF sound in a space

Focus and understanding of the bass stimulus and vibration 'tailing' response

Testing with powerful soundsystem to achieve vibration in a controlled environment

Set up materials to vibrate

Processing recordings to disassociate the bassline + environment

What can I create without reliance on a big soundsystem?

Stepping further away from riddim

Effects to smudge the tonal and timing emphasis of the riddim

Shifting sequences to further break the sense of musical pattern

Adding atmospheric low frequency material

Merging in ambiances, further shifting the source material

Concludes with work drawing on musical and environmental vibration. Research findings:

- I need to create sense of the vibration in spaces without reliance on big PA setups
- I gained a better understanding of how vibration sounds, is created and relates to low frequency stimulus, and how to record
- Using music-based recordings, I employed many techniques to blur riddim but the musical link/pattern remains
- Use of more ambient material developed the creative process and helped explore the idea that vibration potential is inherent within materials, subject to LF stimulus