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The Environment is the Orchestra: Soundscape Composition in LIMBO



What is this about?

- Viewing the audio in *LIMBO* from the perspective of soundscape and acousmatic composition

What is this not about?

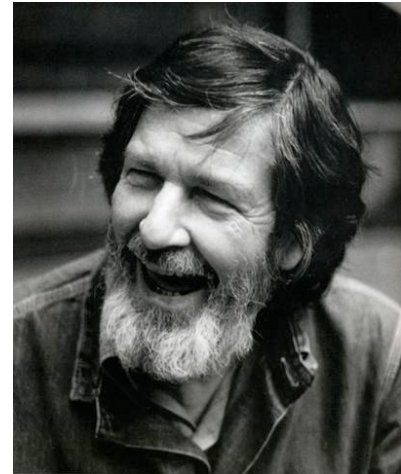
- How exactly the audio in *LIMBO* was conceived

Agenda

- What exactly is soundscape and acousmatic composition (and what is music by the way)?
- Practical examples: Soundscape composition in *LIMBO*

What exactly is soundscape and acousmatic composition (and what is music by the way)?

John Cage (1912-1992) explained the definition of music to *include all categories of sound, such as random everyday noises*
(<http://www.levity.com/corduroy/cage.htm>)



Reviewers' opinions on *LIMBO*

- “Limbo is devoid of a soundtrack...” (Palgn)
- “The music in Limbo is just phenomenal” (Gamersyndrome)
- “There is no music in Limbo...” (Extreme Gamer)
- “The music is also great” (Bangalore Mirror)
- “Music is entirely absent...” (RealGamer)
- “You will hear some incredible music...” (Gamespot)
- “The absence of background music is one of LIMBO's greatest features...” (Game Faqs)

"The border between music and noise is always culturally defined—which implies that, even within a single society, this border does not always pass through the same place; in short, there is rarely a consensus.... By all accounts there is no single and intercultural universal concept defining what music might be" (Nattiez: http://en.wikipedia.org/wiki/Definition_of_music#Nattiez)

Music defined as
“Organized Sound”
(Edgar Varèse 1883 -
1965)



Music ← Organized Sound → Sound Design

Reviewers' opinions on *LIMBO*

“... ambient noise instantly replaces a traditional soundtrack...”
(Rhythmic Circus)

Reviewers' opinions on *LIMBO*

“... the jarring buzz sound effect of the stalking spider, and sounds of the forest’s rustling leaves and the waterfall’s rapids are the only musical elements that will accompany on your journey” (MyGamer)

Reviewers' opinions on *LIMBO*

“The game world's ambient noise sets the mood better than most game's soundtracks.” (Otakubut Gangsta)

Reviewers' opinions on *LIMBO*

“If the purpose of a soundtrack is to bring about an emotional response in an audience, then Limbo succeeds as well as any I’ve ever heard despite not having a single “song” to its name” (digitalhippos)

Reviewers' opinions on *LIMBO*

“Ambient and environmental noises are the featured artists of this show”
(The Tanooki)

Acousmatic Music



“... exists only in a recorded format (as a fixed medium), and is composed for reception via loudspeakers.” (wikipedia.org)

Francios Bayle diffusing sound on the Acousmoniumm, the orchestra of loudspeakers in Paris

Soundscape Composition

“... invoke(s) the listener's associations, memories,
and imagination related to the soundscape.”
(wikipedia.org)

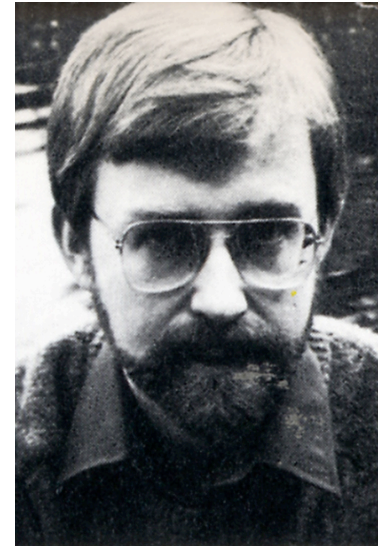
*Members of the World Soundscape Project at
Simon Fraser University in the early 70's*



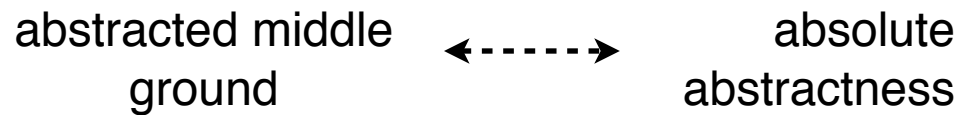
Soundscape Composition

“...to distinguish [soundscape composition] from musique concrète and acousmatic music, I have argued that the original sounds must stay recognizable and the listener's contextual and symbolic associations should be invoked for a piece to be a soundscape composition.”

(Barry Truax, 2008)



Acousmatic Music



Soundscape Composition

Acousmatic Music

contextual
immersion



abstracted middle
ground



absolute
abstractness

Soundscape Composition

Acousmatic Music

contextual
immersion



abstracted middle
ground



absolute
abstractness

*ex. 1: The Commuter's
Dream*

Soundscape Composition

contextual
immersion



abstracted middle
ground

*ex. 1: The Commuter's
Dream*

Acousmatic Music

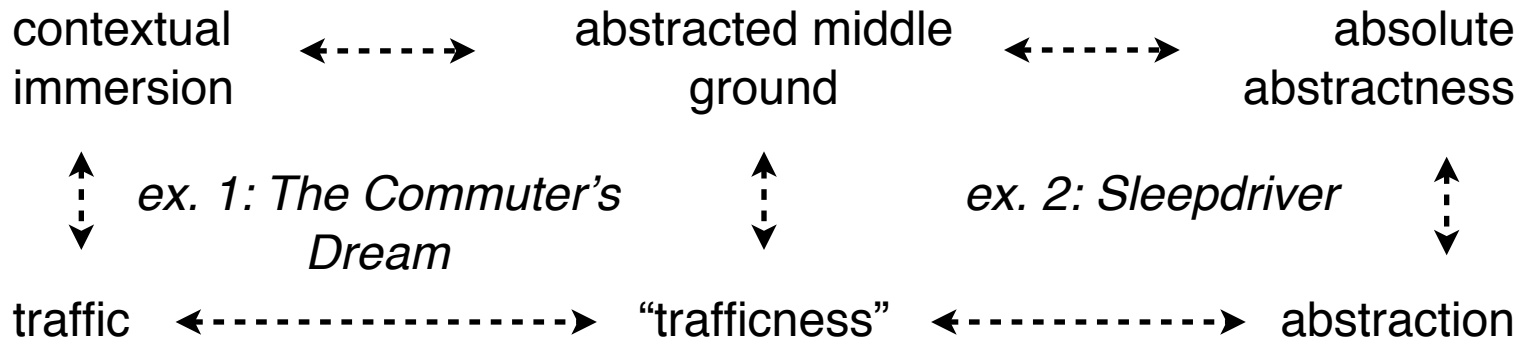


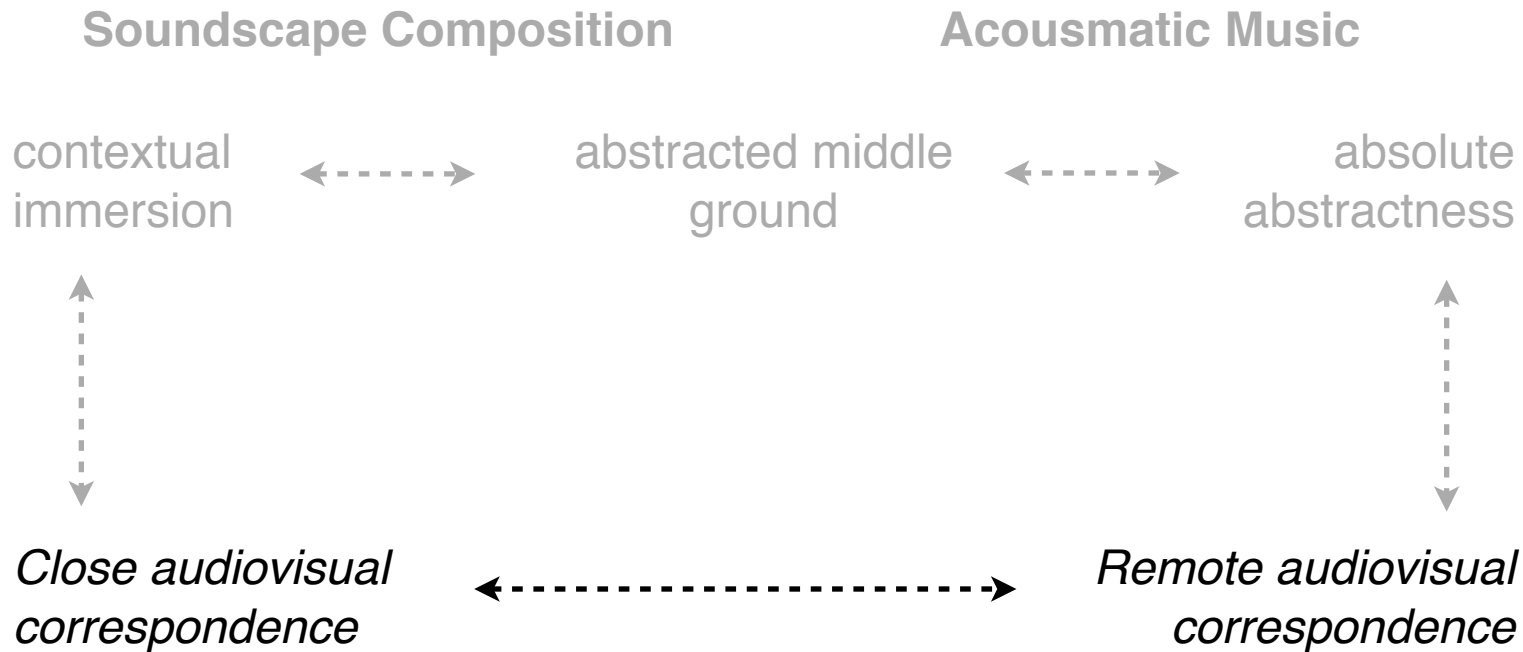
absolute
abstractness

ex. 2: Sleepdriver

Soundscape Composition

Acousmatic Music





Practical examples: Soundscape composition in *LIMBO*



Soundscape Composition

Acousmatic Music

contextual
immersionabstracted middle
groundabsolute
abstractness*ex. 1: HOTEL-sign*

"city buzzing"



harmonized noise



(melodic phrase)

*Close audiovisual
correspondence**Remote audiovisual
correspondence*

Example 1, *HOTEL-sign*

Sound example 3: Original “synthetic” sound

Example 1, *HOTEL-sign*

Sound example 4: The “synthetic” sound running through a wire-recorder



Example 1, *HOTEL-sign*

Sound example 5: harmonized noise

Example 1, *HOTEL-sign*

Sound example 6: melodic sound

Example 1, *HOTEL-sign*

Sound example 7: city buzz

Example 2, *Insect transport*



Soundscape Composition

Acousmatic Music

contextual
immersion



abstracted middle
ground



absolute
abstractness



ex. 2: Insect transport



“city buzzing”



“frozen buzzing of
insects”



(dreamscape)

*Close audiovisual
correspondence*



*Remote audiovisual
correspondence*

Example 2, *Insect transport*

Sound example 8: city buzz

Example 2, *Insect transport*

Sound example 9: “frozen” insect swarm

Example 2, *Insect transport*

Sound example 10: Insect-ish soundscape

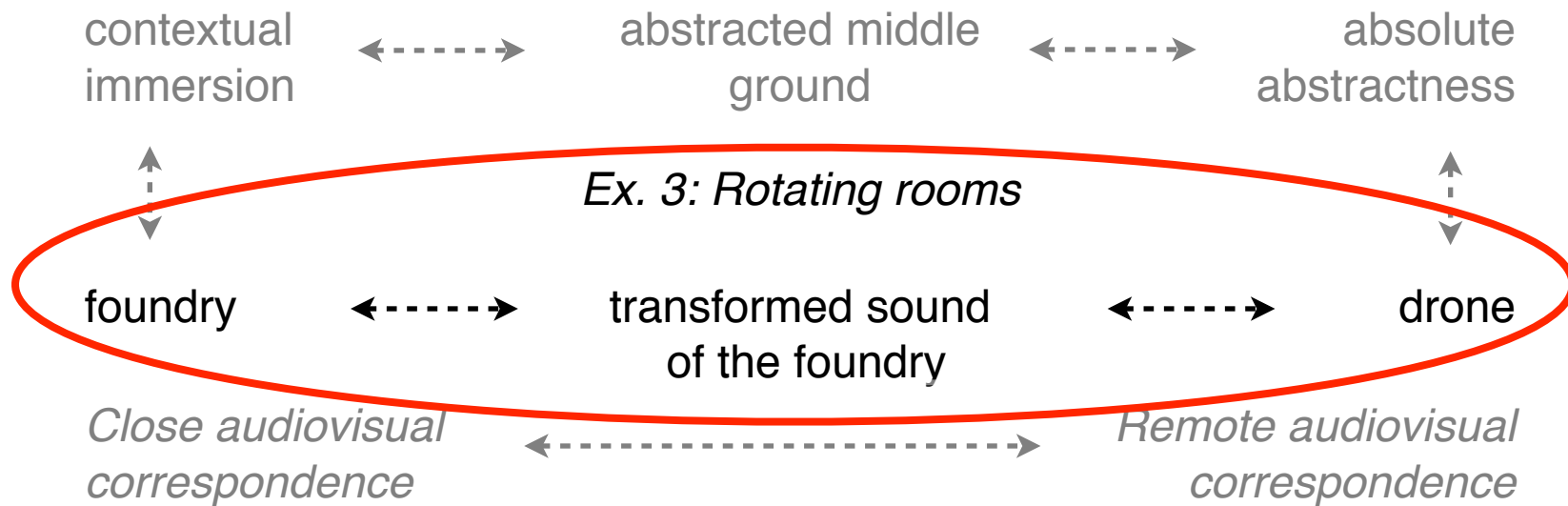
Example 2, *Insect transport*

Sound example 11: stretched-out birdsong, pitched to match the insect-ish soundscape

Example 3, *Rotating rooms*



Example 3, *Rotating rooms*



Example 3, *Rotating rooms*

Sound example 12: recording of a foundry

Example 3, *Rotating rooms*

Sound example 13: orchestral recording

Example 3, *Rotating rooms*

Sound example 14: interpolation between foundry and orchestra

Example 3, *Rotating rooms*

Sound example 15: the previous rotating room (interpolation between orchestra and foundry)

Example 3, *Rotating rooms*

Sound example 16: recording of a bowed cymbal



Example 3, *Rotating rooms*

Sound example 17: interpolation between the sound of the first rotating room and the sound of the bowed cymbal

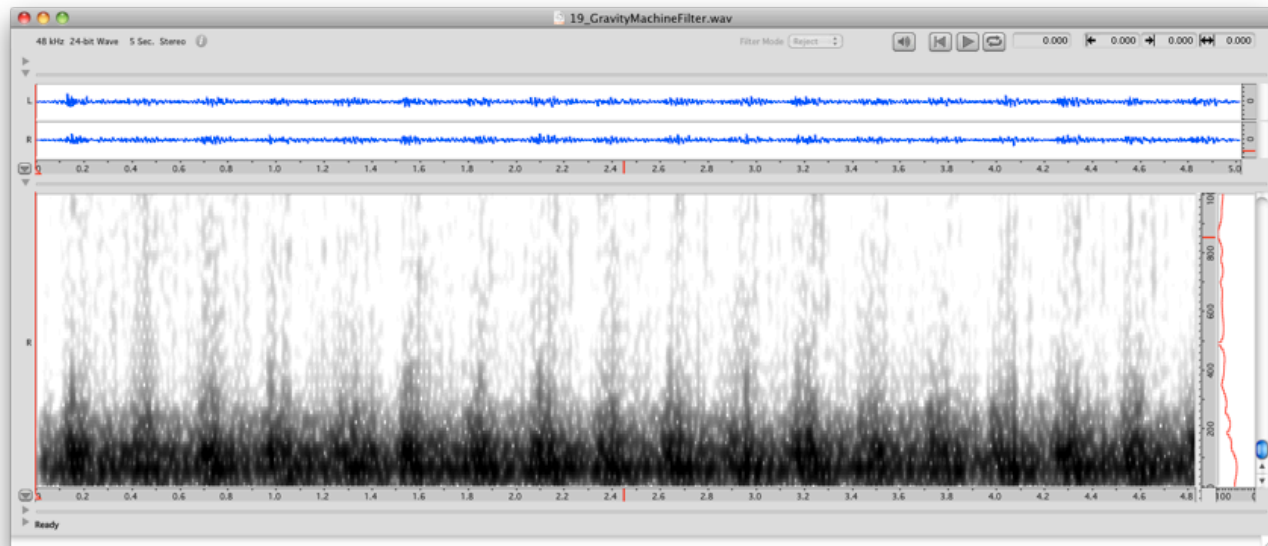
Example 3, *Rotating rooms*

Sound example 18: stinger-like sound, triggered when the boy survives

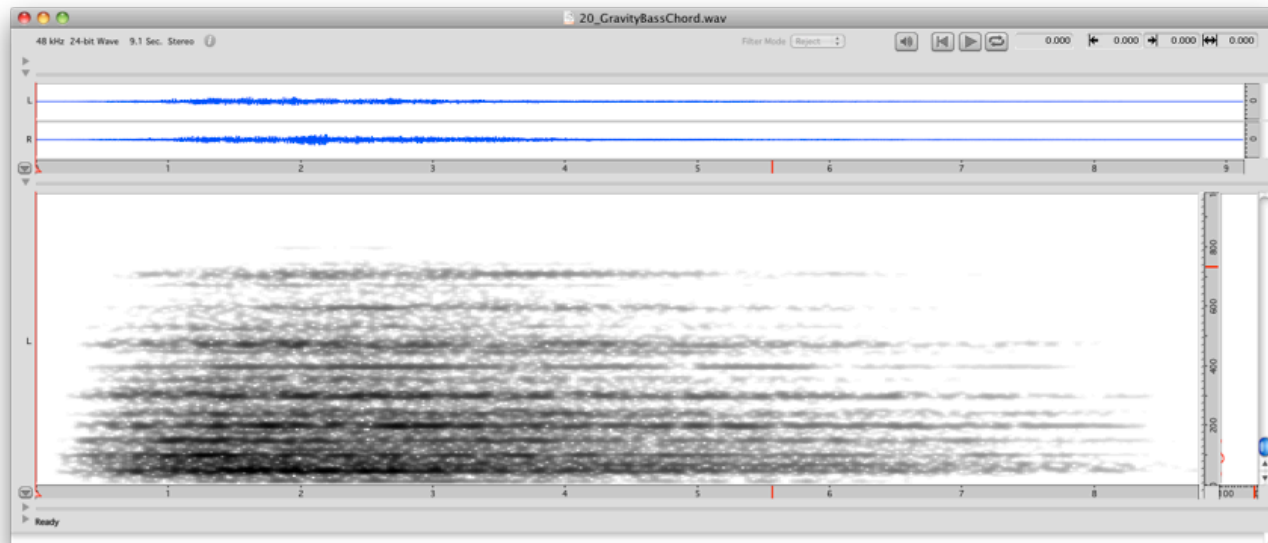
Example 4, *Gravity jump*



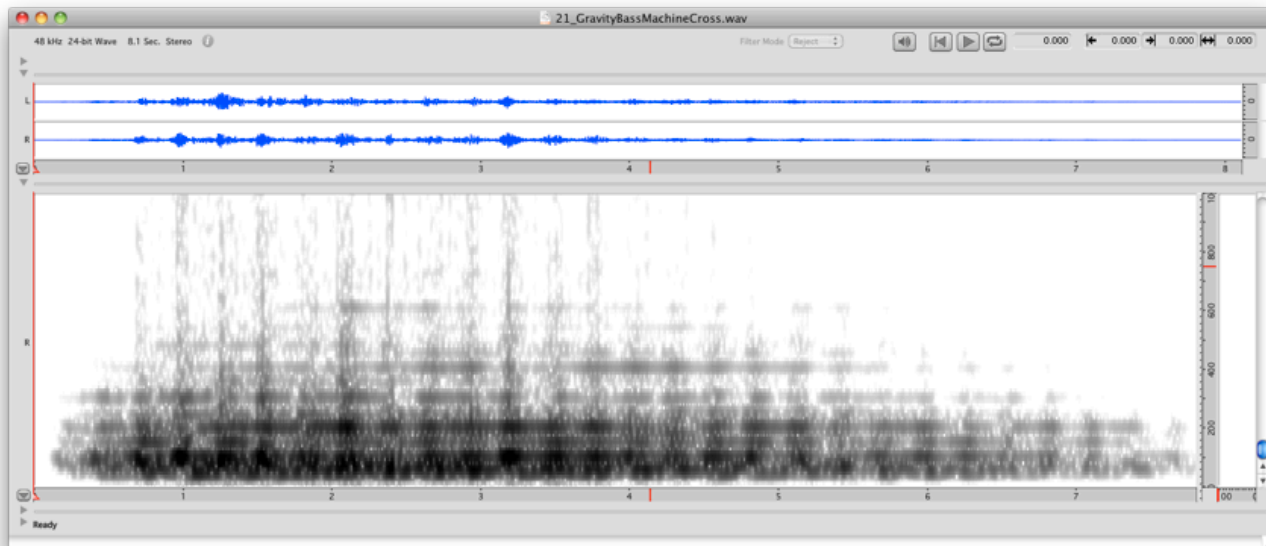
Sound example 19: sound of a pulsing engine driving giant cogwheels



Sound example 20: fundamental note of the present soundscape

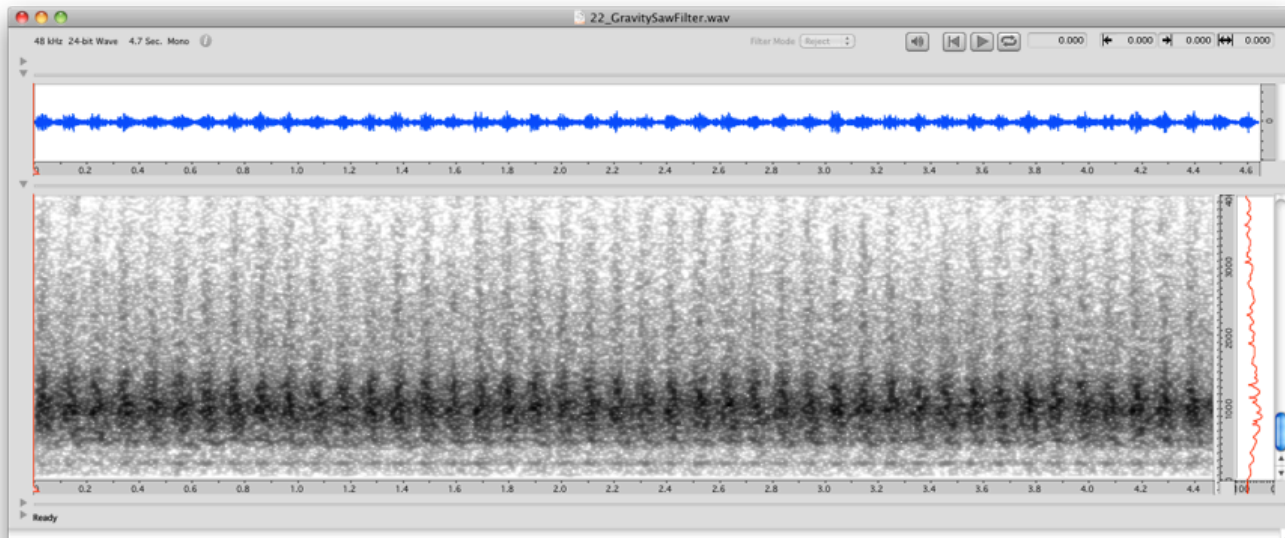


Sound example 21: activating the fundamental note by filtering it through the pulsing engine

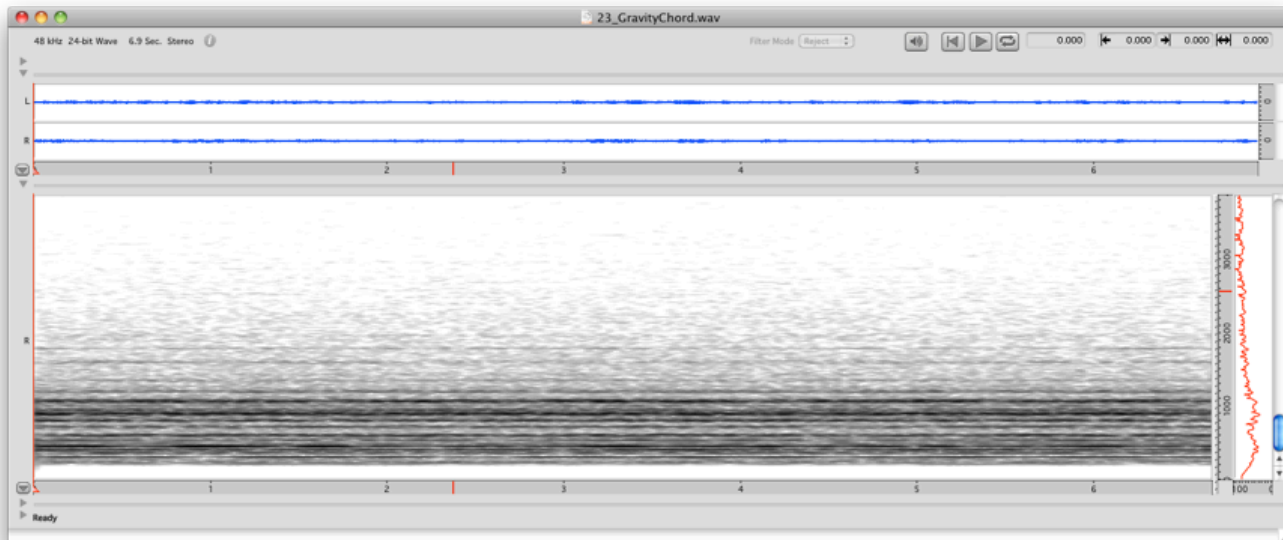




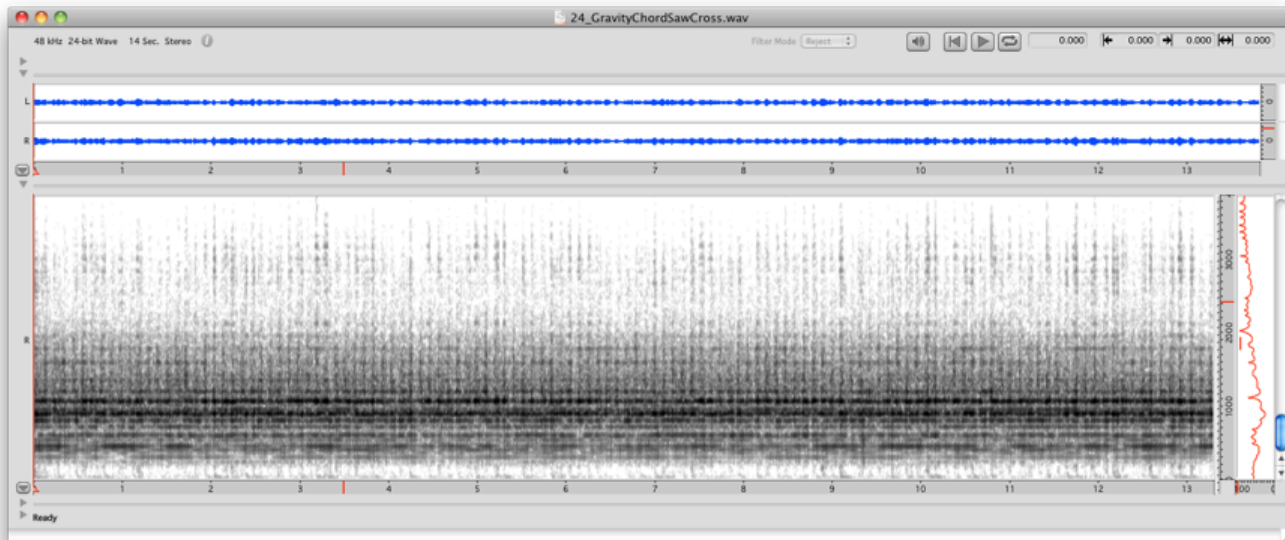
Sound example 22: the swooshing sound of circular saws



Sound example 23: drone matching the present soundscape



Sound example 24: activating the drone by filtering it through the swooshing sound of a circular saw



References

- Andersen, M. S. *Audiovisual Correspondences*. econtact
http://cec.concordia.ca/econtact/12_4/andersen_audiovisual.html
- Truax, B. *Soundscape Composition as Global Music: Electroacoustic Music as Soundscape*.
Organised Sound
<http://www.sfu.ca/~truax/OS7.html>

Music examples:

- Andersen, M. S. *Sleepdriver*
<http://www.martinstigandersen.dk/electroacousticmusic.html>
- Truax, B. *Pendlerdrøm (The Commuter's Dream)*
<http://www.sfu.ca/~truax/pendler.html>

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