THE NATURE OF INDUSTRIAL SOUNDS

A SOUND DOCUMENTATION AND ARCHIVING PROJECT

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Introduction
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SOUND PRESSURE LEVEL 61 dB
OUTSIDE THE INDUSTRIAL COMPLEX

SOUND PRESSURE LEVEL 89 dB
INSIDE THE INDUSTRIAL COMPLEX
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EAR PROTECTION MEASURES WITH EARPLUGS
“......Sometimes, it is useful to document only single sounds in the soundscape in order to get a better impression of their frequency, and patterns of occurrence”. R. Murray Schafer- "The Soundscape: Our Sonic Environment and the Tuning of the World".- Page 208.
1. Capture sounds from spots in the industrial complex

2. Analysis of sounds with images of the sound spots

3. Reintroduction of sounds, images and analysis onto virtual space

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The project idea
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The Project

The essence of documentation and archiving

- "Ear Cleaning" (The art of learning how to listen) – R Murray Schafer
- Archiving industrial sounds as artifacts for preservation and future reference
- Studying the behaviour of sounds in the industrial complex
- Learning how to record in a multi sound source setting
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The project

http://memymilk.com/samuel/index.html
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Analysis structure of the sounds

. General character – colour groups

. Summary character – Webspace

. Detailed Analysis – Documentation and Documentation for Webspace
Industrial sounds represent a wide range of styles and structure therefore a consideration was given to its models of representation. The poeitic, esthetic (Marc Battier) and hybrid (Stephane Roy 2003) methods were used in the analysis.
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Poeitic Analysis

Processes or *procedure* that go into making the sound the sound. Example

- Spectrography (Audio Signal Visualisation)
- Graphic Interpretations (Graphic Transcriptions)
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Poetic Analysis (Spectrography/Audio Signal Visualisations)

- Time-Frequency Representation (Spectrogram/Sonogram)
- Time-Domain Representation (Waveform): displays amplitude changes of a signal over time.
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Poetic Analysis (Spectrography/Audio Signal Visualisations)

Frequency-Domain Representation (Spectrograph) : displays amplitude of frequencies occurring within a complex sound.
Poetic Analysis (Graphic Interpretations/Graphic Transcriptions)

Graphic Interpretations (Graphic Transcriptions)

. Sees general sound events as abstract shapes corresponding to duration, frequency and intensity.

. Colours are used with shapes to define particular parameters or sound objects.
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Graphic Transcriptions Example

A graphic transcription of sound source T102

https://vimeo.com/303075724
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Esthetic Analysis

. Analysis from **perceptual** basis


. Perceived spectral content – Denis Smalley

. Summary description of sounds on webspace
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Hybrid Analysis

A mix of esthetic and poeitic analysis (*Perception* and *Procedure*) – (Roy 2003)

Project consists of the hybrid form in the "Characteristics of industrial sounds".
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Characteristics of Industrial Sounds
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Dynamic patterns and Poly-rhythmic textures

Please refer to page 38 in the project documentation and sound source T77
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Vocal and tonal images

Please refer to page 39 in the project documentation and sound source T70
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Evolutionary patterns

Please refer to page 40 in the project documentation and sound source T90
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Dormancy in space

Please refer to page 41 in the project documentation and sound source T103
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Conclusion

. Industrial Sounds posses dual characters of dominance and latency

. Complex to represent with graphic images

. Unstable behaviour – can be observed on realtime spectrogram

. Imitation of percussion instruments. T77
Conclusion

Websspace documentation purposed for

. *Ear Cleaning – The art of learning how to listen - R Murray Schafer*

. *Introduction to Microphony*

. *Reference Listening*

. *Introduction to electroacoustic listening – Uploaded graphic interpretation works*
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THANK YOU FOR YOUR ATTENTION!