

_object.soundingspace.rough4radio3

for 8+1 channels

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rough4radio3 is an installation for 8-channel system plus one other sound source. The 8-channel system plays a set of eight sound sources (one per speaker) that are generated from the same small set of noise samples. However, these sound sources vary in certain characteristics such that they form a “noise soundscape.” The “other” source contains some form of communicative sound signal (speech, an instrumental performance, a recording of music, etc.) that is projected within this fabricated sound environment. As a result, *rough4radio3* acts not as an immersive sonic experience, but rather as an environment within which artistic performance and acoustic communication may occur.

_object.soundingspace, a series of audio works that includes *rough4radio3*, was developed to explore the construction of what I call “media soundscape composition.” Building on the fields of soundscape ecology, media ecology, and soundscape composition, this academic and artistic exploration aims to reveal the nature of sound environments that are constructed from various sound media types. Specifically, *rough4radio3* makes use of radio noise to construct an artificial soundscape that in some ways mimics that of a physical (“real”) environment, suggesting both similarity and contrast. The introduction of an “other” performance potentially adds an additional level of contrast.

1 Sample Generation

- Record the signal of a radio. Travel a radio frequency band several times at as consistent a speed as possible.
- Divide recording (in time) and discard samples where signal is much greater than noise – where speech can be understood, music can be detected.
- Process samples in consistent way.

2 Sources

- Eight similar speakers in an equally spaced ring (pointed inward) project Sources A-H (one source per speaker).
- A ninth source (Source O) is projected by an other sound source. If the source is a speaker, this speaker should be different from the set of eight.
- Sources A-H are constructed from the noise sample bank (as generated in Section 1). Each source is constructed to follow the guidelines below and is played constantly. Source O is played for one or more periods of time within the lifetime of the installation.

2.1 Sources A-H

Sources A-H are divided into 4 categories, Types 1-4, as listed below:

- Type 1 (Sources A, C, E, G): Resemble ambient noise. Flat envelope, dense sample triggering. Each channel independent.
- Type 2 (Sources B, F): Resemble waves or cars. Like ambient noise but with envelopes with well-defined, long fade-in/out (length and amplitude may vary). Each channel independent (in terms of sample triggering and enveloping).
- Type 3 (Source D): Resemble foghorn. Simple (possibly pitched) sample repeated in identical way, equal spacing with relatively long silence between.
- Type 4 (Source H): Silence or near-silence.

2.2 Source O

Source O may be a live performance or the projection of a recording.

- If Source O is a live performance, it should be independent of the sound generated by Sources A-H. (Source O should not react in any way to changes in characteristics of Sources A-H.)
- If a recording is used, it should be a piece of “found sound.” It should not be processed with any musical intention. Most importantly, the sample should not be faded in or out (except very briefly at start and end), nor should the level be varied. Only decisions made should be: what sample to play, when to play it, and what channel to play it on.
- Any combination of performances can be presented during the installation.

3 Mixing

- Sources A-G should be mixed so that each type has a similar average loudness. (This means that the peak level of Type 3 should be greater than that of Type 1 to compensate for the periods of silence.) The overall loudness of Sources A-H should be somewhere between very loud and painfully loud.
- Source O should be mixed such that the signal is very difficult but not always impossible to “understand.” With speech, for example, one should be able to make out some words with concentration. With music, one would have to concentrate equally hard to follow a melody, harmonic progression, etc.

4 Presentation

- If possible, the performance space should be arranged to encourage movement of the audience.
- The set of 8 speakers should be visible as should Source O.
- If the performance space is a room, the set of 8 speakers should be at the perimeter. Source O can be placed anywhere.
- Presentation of multiple realizations is encouraged. One may explore various sample banks (different radio frequency bands), signal types for Source O, positioning of Source O, performance times, performance spaces, etc.

Note about sample recording (realization 1)

The sample recording presented is a stereo, fixed-length work, and therefore differs from the presentation in an installation setting. In this recording, a sample of Samuel Beckett's radio play, *Embers*, is used as Source O. In "live" presentation, the nature of Source O will be chosen based on the availability of resources and the specific context of the presentation environment.