The University of Calgary

Faculty of Environmental Design EVDS 711
Faculty of Communication and Culture COMS 501.46
Department of Music MUS 481

Acoustic Communications

Summer Session
Lec. 60 TR 18:00 - 20:45
Office hours TR 16:00 - 17:45, or by appointment

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Final Course Outline

If we wish to understand sound and its behaviour generally--as implied by the term "acoustic communication"--and we turn to the traditional disciplines that study it, we find that they are scattered institutionally throughout the arts and sciences, engineering and medicine. Further, each discipline or specialization concerns itself with only a particular aspect of the entire subject, and often there is little attempt to bridge the arbitrary gaps between them. Each discipline has also developed its own terminology and concepts through which it expresses its knowledge, and so we find that specialized disciplines which study sound, such as acoustics, use a great number of abstract ideas that often seem removed from the perceptual immediacy of the acoustic world that surrounds us.

This course is intended to help students bridge those disciplinary gaps which have traditionally separated the study of sound, its behaviour, and its effects upon us and our environment. This latter concept--the relationship between sound and the environment, is referred to as
acoustic ecology.

A particular focus of the course will be a study of the impact of technology on our acoustic environment--physiological, social and ecological. This component of the course will be of special interest to students in environmental studies, audiology, acoustics, engineering, urban planning and biology specializing in the effects of sound on behavioural ecology. Renowned Canadian scientist Ursula Franklin states: "While we should not forget that [these] prescriptive technologies are often exceedingly effective and efficient, they come with an enormous social mortgage. The mortgage means that we live in a culture of compliance."

Nowhere is the problem so vividly illustrated as when we consider the sort of "cultural compliances" that have been wrought by technology on our acoustic environment: it has recently been demonstrated, for example, that severe psychiatric disorders occur in children continually exposed to excessive urban noise.

These sorts of compliances--those having to do with our acoustic environment--are especially insidious since we, living in a visually-oriented culture, don't always notice a change (and appreciate its significance) in our acoustic environment as readily as we might in our visual environment. We plant trees to beautify a city park yet are not even aware of the steady increase in ambient traffic noise. This is because the sound of traffic has become "normal," or, as Ursula Franklin put it, we have been conditioned "to accept that there is only one way of doing it." The recent concerns over the impact upon wildlife of helicopter noise caused by "heli-hiking" in Banff National Park is another example.

The theoretical aspect of the course will centre around a discussion of the three major systems of acoustic communication: speech, music and soundscape. Although each system has its own traditional patterns of organization and specific characteristics, we shall try to step back from these details to gain a perspective of them as forming a continuum.

Format

The course will be conducted as a seminar. A few class meetings will take place off campus so that students can make field studies of certain acoustical environments of buildings and urban areas in Calgary. During the week of August 8 to August 14 students will have the opportunity to attend *The Tuning of the World* International Conference on Acoustic Ecology, at the Banff Centre. Students in the course are also registered in the conference.

Textbooks

Attali, Jacques. *Noise.* University of Minnesota Press, 1988.

Other readings will be distributed in class.

Class Schedule

A preliminary schedule of topics to be covered is listed below.

July 6 Introduction: Acoustic tradition and the communicational approach

July 8 The Listener: Hearing and listening; listener preferences and attitudes

July 13 Voice and Soundmaking: paralanguages

July 15 Systems of Acoustic Communication: Speech, music, and soundscape

July 20 Book Reports

July 22 Noise and the Urban Soundscape

July 27 Electroacoustics: The impact of technology on acoustic communication

July 29 Electrification: The new soundscape

August 3 Group Soundscape Recording Presentations

August 5 Group Soundscape Recording Presentations

August 10 *The Tuning of the World* Conference (Banff)

August 12 *The Tuning of the World Conference* (Banff)

August 17 Wrap-up

Evaluation and Grading

Course work consists of three components: a book report of 4-5 pages (which includes an in-class oral presentation), a group presentation on an acoustic soundscape recording, and a term paper. The topic of the paper will be developed and agreed upon by consultation between the student and the instructor. Each student's topic may also reflect the student's individual area of disciplinary specialization. There is no registrar-scheduled final examination.

Book Report (written) 20%	July 22
In-class oral presentation of book report 10%	July 20
Group soundscape recording project 20%	August 3 & 5
Term Paper 40%	August 17
Class Participation 10%	

Please note that all assignments must be completed for a passing grade, and are due in class on the days specified. Late assignments will have one grade point deducted per day late unless arrangements for late submission are made with me prior to the due date.

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