

CTCS 499

Radical Machines:
Experiments in 20th Century Media Technology

Spring 2018

4 units

Wednesday 10:00–1:50pm

SCI 207

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As smartphones, high-speed data, and algorithmic media reconfigure our daily habits of perceiving the world, we are left wondering, in the words of German media theorist Friedrich Kittler, whether we knew anything “before media provided us with models and metaphors.” Yet, the sea change in technologically-aided seeing and hearing hardly began with Snapchat, Instagram, or YouTube. In fact, well before the internet, technologies of audiovisual storage and transmission—film, radio, telephony, phonography, and analog audio and video synthesis—radically transformed understandings of time, distance, community, and history.

Each week in this course, we dive from our current moment into an episode from media (nearly) gone by. We consider how artists, writers, and technologists from the 1910s to the 1990s pushed these machines to their limits. Our kaleidoscope of media experiments raises questions about the politics, aesthetics, and ethics of life in technologically-mediated time and space. Through the semester, we’ll develop 1) a sense of the stakes and ambitions for radical media in the last century, and 2) a historical perspective on our contemporary setting. This inquiry will culminate in a final project, which will hone your skills of written and multimedia argumentation.

Crucially, we combine historical and theoretical discussion with screenings, listening sessions, and hands-on experimentation in weekly “lab” sessions, in which we’ll turn the dials on an analog radio, splice together cuts of 16mm film, and match beats on a pair of turntables. You’ll come away from the course with a sense of how—on the most practical, physical level—these media function. More broadly, we’ll discover how this very material of media inflects the “models and metaphors” we use to understand our existence as humans among machines.

COMPONENTS

Each course meeting will consist of a lecture, lab, screening/listening sessions, and discussion.

ASSIGNMENTS AND GRADING BREAKDOWN

Participation (10%)

Evidence of engagement with course materials in lab, discussion, and online.

Weekly response posts (30%)

A 300–500 word reflection on the hands-on experience in our lab and the perspectives in our screening, preparation and discussions.

Due by 11:59pm on the night before class meetings.

Media technology project (20%)

A report on a moment of technological experimentation not covered in the course. 6–8 pages.

Proposal due by 5pm on January 26.

Project due by 5pm on February 9.

Final paper/project (40%)

A research-based written or multimedia essay on course materials, to be developed in consultation with me. 10–12 pages.

Proposal due by 5pm on March 30.

Abstract and bibliography due by 5pm on April 13.

Project due by the course's university-scheduled final examination time.

POLICIES

Punctual attendance every week is mandatory. After one “freebie,” each subsequent absence without documentation of an extenuating circumstance (e.g., a doctor's note) will lower final grade by a half-grade.

Phones, tablets, laptops, and other electronic technologies are not allowed in class, except in select instances when directed by instructor. (If you require an accommodation to this policy for a disability, please contact me.)

TEXTS AND OTHER MEDIA

Texts will be available as pdfs posted on the course wiki. Students should bring print-outs of readings to each week's class. Selected audiovisual works will be distributed for home consultation by the wiki and email. I will provide (or make available) all other necessary equipment.

JANUARY 10
BACK TO THE FUTURE: APPROACHING AVANT-GARDE MEDIA

Preparation:

Siegfried Zielinski, from *The Deep Time of Media*

Lisa Gitelman, "Media as Historical Subjects"

Wolfgang Ernst, "Media Archaeography: Method and Machine versus the History and Narrative of Media"

Erkki Huhtamo and Jussi Parikka, "An Archaeology of Media Archaeology" (optional)

Lab:

Workshop on online sources in media studies: ubu.com, archive.org, etc.

JANUARY 17
ELECTRICAL GHOSTS: RADIO, PART 1

Preparation:

Rudolf Arnheim, from *Radio*

F.T. Marinetti, "The Founding and Manifesto of Futurism"

Pino Masnata and Filippo Tommaso Marinetti, "La Radia"

Pino Masnata, from *RADIA, A Gloss of the 1933 Futurist Radio Manifesto*

Dziga Vertov, "Kinopravda & Radiopravda"

Margaret Fisher, "Futurism and Radio" (optional)

Lab:

Analog radio workshop

Screening and Listening Session:

Dziga Vertov, *Radio Pravda*, sound recording, 1925

F.T. Marinetti and Aldo Giuntini, "Sintesi Musicali Futuristiche," sound recording, 1931

Joris Ivens, *Phillips Radio*, film, 1931

Dziga Vertov, *Enthusiasm*, film, 1931

JANUARY 24
COUNTER-TRANSMISSION: RADIO, PART 2

Preparation:

John Cage and Richard Kostelanetz, "A Conversation about Radio"

John Cage, "Composition as a Process"

Bertolt Brecht, "The Radio as an Apparatus of Communication"

Douglas Kahn, "Histories of Sound, Once Removed" (optional)

Lab:

Visit to KXSC

Screening and Listening Session:

John Cage, *Radio Music*, composition

John Cage, *Imaginary Landscape no. 4*, composition for 12 radios

Jaimie D'Cruz, *The Last Pirates: Britain's Rebel DJs*, BBC4 television documentary

*MEDIA TECHNOLOGY PROJECT PROPOSAL
DUE BY 5PM ON FRIDAY, JANUARY 26*

JANUARY 31

LIVE CIRCUITS: TELEVISION, PART 1

Preparation:

Max Headroom Pirating Incident, video and online discussion, <https://www.youtube.com/watch?v=tWdgAMYjYSs>, <https://redd.it/eeb6e>

Wolfgang Ernst, "Between Real Time and Memory on Demand"

Rosalind Krauss, "Video and the Aesthetics of Narcissism"

Samuel Weber, "Television: Set and Screen"

Lab:

Analog antenna and CRT workshop

Screening:

Nancy Holt and Richard Serra, *Boomerang*, video, 1974

Vito Acconci, *Centers*, video, 1971

John Cage, *Water Walk*, episode of Television series *I've Got a Secret*, 1960

Bill Viola, *Reverse Television*, video, 1983

Jill Magid, *Evidence Locker*, video, 2004

FEBRUARY 7

SCANNING: TELEVISION, PART 2

Preparation:

David Joselit, from *Feedback*

Bill Viola, "The Sound of One Line Scanning"

Martha Rosler, "Video Art: Shedding the Utopian Moment"

Erkki Huhtamo, "Elements of Screenology: Toward an Archaeology of the Screen" (optional)

Lab:

Visit to TrojanVision

Screening:

Joan Jonas, *Vertical Roll*, video, 1972

Dara Birnbaum, *Technology/Transformation: Wonder Woman*, video, 1978

Aldo Tambellini, *Black TV*, video, 1968

Hollis Frampton, *Travelling Matte*, 16mm film, 1971

*MEDIA TECHNOLOGY PROJECT
DUE BY 5PM ON FRIDAY, FEBRUARY 9*

FEBRUARY 14

HANGING ON THE TELEPHONE: PHREAKING

Preparation:

Ron Rosenbaum, "Secrets of the Little Blue Box"

Phil Lapsley, from *Exploding the Phone: The Untold Story of the Teenagers and Outlaws
Who Hacked Ma Bell*

Avital Ronell, from *The Telephone Book*

Joan Donovan, "'Can You Hear Me Now?' Phreaking the Party Line from Operators to
Occupy." (optional)

Lab:

Landline telephone workshop, dial-a-poem

Screening/listening:

Christian Marclay, *Telephones*, video, 1995

Interview with John "Captain Crunch" Draper

Stuart Legg, The UK General Post Office, *The Coming of the Dial*, 1933

Joybubbles; Telephone Project, telephone recording, (718) 362-9578

FEBRUARY 21

STICKY SOUND: MAGNETIC AUDIOTAPE

Preparation:

Pierre Schaeffer, "Sound and the Century: A Socio-Aesthetic Treatise"

Brian Kane, from *Sound Unseen: Acousmatic Sound in Theory and Practice*

Douglas Kahn, from *Noise, Water, Meat: A History of Sound in the Arts*

Lab:

Cassette tape field recordings

Screening and Listening Session:

Craig Baldwin, *Sonic Outlaws*, film, 1995

Selections from Terry Riley, Steve Reich, Lamonte Young

William Basinski, *Disintegration Loops*, audio, 2002–2003

FEBRUARY 28
COMPILATION: FILM, PART 1

Preparation:

Jonathan Lethem, “The Ecstasy of Influence”

Emily Cohen, “The Orphan Manifesto: Orphan Films and the Politics of
Reproduction”

William Burroughs, “The Cut Up Method”

Lab:

Super 8mm film animation and splicing project

Screening:

Esfir Shub, selections from *The Fall of the Romanov Dynasty*, 1927)

Raphael Montañez Ortiz, *Newsreel*, 1958

Raphael Montañez Ortiz, *Cowboy and “Indian” Film*, 1957–1958

Gustav Deutsch, selections from *Film Ist*, film, 1998

Thom Andersen, *Los Angeles Plays Itself, pt 1*, 2001

MARCH 7
TIME MACHINE: FILM, PART 2

Preparation:

Jonathan Walley, “The Material of Film and the Idea of Cinema: Contrasting Practices in
Sixties and Seventies Avant-Garde Film”

P. Adams Sitney, “Structural Film”

Lab:

Visit to Herbert E. Farmer Motion Picture Technology Collection

Screening:

Stan Brakhage, *Mothlight*, 16mm film, 1963

Larry Gottheim, *Fogline*, 16mm film, 1970

Ken Jacobs, *Soft Rain*, 16mm film, 1968

George Landow, *The Film that Rises to the Surface as Clarified Butter*, 16mm film, 1968

MARCH 21

NEEDLE: PHONOGRAPHY, PART 1

Preparation:

Richard Osbourne, from *Vinyl: A History of the Analogue Record*

Andrew Perchuk, "Harry Smith, an Ethnographic Modernist in America"

Friedrich Kittler, from *Grammophone, Film, Typewriter*

Rainer Maria Rilke, "Primal Sound"

Lab:

Tin-foil phonograph workshop, LP listening

Listening Session:

Harry Smith (compiler,) selections from *The American Anthology of American Folk Music*, LP record, 1952

MARCH 28

GROOVE: PHONOGRAPHY, PART 2

Preparation:

Kebrew McCleod, "An Oral History of Sampling from Turntables to Mashups"

Jonathan Sterne, from *An Audible Past*

Emily Thompson, from *The Soundscape of Modernity*

Lab:

Turntable workshop

Listening Session and Screening:

DJ Shadow, *Endtroducing*, LP record, 1996

Baz Luhrmann and Stephen Adley Guirgis, selections of *The Get Down*, video, 2016

Darby Wheeler, selections from *Hip Hop Evolution*

*FINAL PROJECT PROPOSAL PROPOSAL STATEMENT
DUE BY 5PM ON FRIDAY, MARCH 30*

APRIL 4
VIDEOTAPE, VHS & THE VCR

Preparation:

Lucas Hilderbrand, from *Inherent Vice: Bootleg Histories of Videotape and Copyright*
Caetlin Benson-Allot, from *Killer Tapes and Shattered Screens: Video Spectatorship from VHS to File Sharing*

Lab:

VCR & VHS dissection

Screening:

Craig Baldwin, *Tribulation 99*, video, 1992
Abigail Child, *Mercy*, video, 1989
Jean Luc-Goddard, selections from *Histoire(s) du Cinéma*, video, 1988–1998

APRIL 11
ELECTRONIC NOISE: ANALOG AUDIO SYNTHESIS

Preparation:

Trevor Pinch and Frank Trocco, “Shaping the Synthesizer”
Trevor Pinch, “Moments in the Valuation of Sound: The Early History of Synthesizers”

Lab:

Special guest visitor & modular synthesizer workshop

Listening session and screening:

Terry Riley, *A Rainbow in Curved Air*, LP record, 1971
Hans Fjellstaad, selections from *Moog*, video, 2004
Alexander Dunn, selections from *808*, video, 2015

*FINAL PROJECT BIBLIOGRAPHY AND ABSTRACT
DUE BY 5PM ON FRIDAY, APRIL 13*

APRIL 18
SEEING SOUND: ANALOG VIDEO SYNTHESIS

Preparation:

Jon Krasner, “A Brief History of Motion Graphics,” text, 2013

Tom Sito, text selections from *Moving Innovation: A History of Computer Animation*,
Peter Collopy, "Video Synthesizers: From Analog Computing to Digital Art"

Lab:

Oscillator workshop, guest lecture

Screening:

Mary Ellen Bute, *Abstronic*, 35mm film, 1952
Mary Ellen Bute, *Parabola*, 35mm film, 1937
John Whitney Sr, *Catalog*, 16mm film, 1961
Eric Siegel, *Einstine*, video, 1968
Stephen Beck and Jordan Belson, *Cycles*, 16mm film, 1975

APRIL 25

CODAS: POST-INTERNET, POST-CONTEMPORARY

Preparation:

Jonathan Crary, from *24/7*
Hito Steyerl, "The Spam of the Earth: Withdrawal from Representation"
Boris Groys, "Cosmic Anxiety"
McKenzie Wark, "Digital Provenance and the Artwork as Derivative"
Peter Galison interview with Trevor Paglen, *Aperture Magazine*

Lab:

Final project workshop

Screening:

Hito Steyerl, *How Not to Be Seen: A Fucking Didactic Educational .MOV File*, video,
2014
Camille Henrot, *Gross Fatigue*, video, 2013
Oliver Laric, *Versions*, video, 2012
Oliver Laric, *Untitled*, video, 2015

FINAL PROJECT
DUE BY SCHEDULED EXAM TIME

Statement on Academic Conduct and Support Systems

Academic Conduct:

Plagiarism – presenting someone else’s ideas as your own, either verbatim or recast in your own words – is a serious academic offense with serious consequences. Please familiarize yourself with the discussion of plagiarism in *SCampus* in Part B, Section 11, “Behavior Violating University Standards” <https://policy.usc.edu/scampus-part-b/>. Other forms of academic dishonesty are equally unacceptable. See additional information in *SCampus* and university policies on scientific misconduct, <http://policy.usc.edu/scientific-misconduct>.

Support Systems:

Student Counseling Services (SCS) - (213) 740-7711 – 24/7 on call

Free and confidential mental health treatment for students, including short-term psychotherapy, group counseling, stress fitness workshops, and crisis intervention. <https://engemannshc.usc.edu/counseling/>

National Suicide Prevention Lifeline - 1-800-273-8255

Provides free and confidential emotional support to people in suicidal crisis or emotional distress 24 hours a day, 7 days a week. <http://www.suicidepreventionlifeline.org>

Relationship and Sexual Violence Prevention Services (RSVP) - (213) 740-4900 - 24/7 on call

Free and confidential therapy services, workshops, and training for situations related to gender-based harm. <https://engemannshc.usc.edu/rsvp/>

Sexual Assault Resource Center

For more information about how to get help or help a survivor, rights, reporting options, and additional resources, visit the website: <http://sarc.usc.edu/>

Office of Equity and Diversity (OED)/Title IX Compliance – (213) 740-5086

Works with faculty, staff, visitors, applicants, and students around issues of protected class. <https://equity.usc.edu/>

Bias Assessment Response and Support

Incidents of bias, hate crimes and microaggressions need to be reported allowing for appropriate investigation and response. <https://studentaffairs.usc.edu/bias-assessment-response-support/>

The Office of Disability Services and Programs

Provides certification for students with disabilities and helps arrange relevant accommodations. <http://dsp.usc.edu>

Student Support and Advocacy – (213) 821-4710

Assists students and families in resolving complex issues adversely affecting their success as a student EX: personal, financial, and academic. <https://studentaffairs.usc.edu/ssa/>

Diversity at USC

Information on events, programs and training, the Diversity Task Force (including representatives for each school), chronology, participation, and various resources for students. <https://diversity.usc.edu/>

USC Emergency Information

Provides safety and other updates, including ways in which instruction will be continued if an officially declared emergency makes travel to campus infeasible, <http://emergency.usc.edu>

USC Department of Public Safety – 213-740-4321 (UPC) and 323-442-1000 (HSC) for 24-hour emergency assistance or to report a crime.

Provides overall safety to USC community. <http://dps.usc.edu>

*FOOD AND DRINKS (OTHER THAN WATER) ARE NOT PERMITTED IN ANY
INSTRUCTIONAL SPACES IN THE CINEMATIC ARTS COMPLEX*