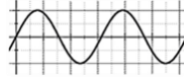# Timbre at the Crossroads (MUS 230R)

Harvard University Music Department

Tuesdays @ 1:15 – 3:15pm EST, Fall 2020

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Prospectus

In this seminar, we will explore how the idea of "timbre" is constructed across diverse disciplinary frames, including music research, composition, sound studies, media history, psychoacoustics, and the information sciences. Our emphasis here on cross-disciplinarity reflects timbre's status as a multivalent sonic parameter that is notoriously difficult to define, and which has been theorized according to varying interpretive logics in different historical epochs. Today, it is often defined negatively as the characteristic quality of sound that is *neither* pitch *nor* loudness, and which allows listeners to distinguish two instruments playing the same note. But this definition only takes us so far, provoking more questions than answers: what exactly *is* timbre? What are its physical correlates and how do these features map onto auditory perception? What can such matters of scientific fact tell us about how timbre conveys meaning as an expressive musical element? And what might we gain by considering timbre through alternative lenses of embodiment, semantics, affect, and cultural identity?

Over the next few months, we will open a window into the complex dynamics shaping current discourse in timbre studies, working to make sense of the messy, often conflicting accounts that one encounters in different corners of the field. Moving freely between time scales, we will consider 18th-century organological treatises alongside 21st-century assisted orchestration software, while also attending to the micro-temporal aspects of timbre as a multidimensional psychoacoustic phenomenon. Throughout, we will couch specific approaches to timbre in terms of larger historical debates over the nature of human audition, examining how this knowledge is entangled with a wide range of epistemic instruments and sonic practices. We will also bolster our historical and theoretical lines of inquiry with hands-on activities, learning how to use audio-analysis tools that will help you effectively engage timbre in your own research or musical practice. These complementary approaches will orient our weekly meetings as we progress through four learning modules—*Introduction to Timbre Studies* (Weeks 1-2); *Historical and Material Perspectives* (Weeks 3-6); *Timbre, Sound Synthesis, and the Digital Revolution* (Weeks 7-9); and *Timbre as an Object of Media, Culture, and Politics* (Weeks 10-12). Please see the week-by-week schedule below for details on which topics will be covered in each module, as well as information on reading, listening, and related assignments.

Course Schedule

MODULE 1: Introduction to Timbre Studies

In this first module, we will set up a broad framework for understanding current debates in timbre studies, introducing basic (and yet, often conflicting) definitions for timbre, while also gaining familiarity with important methodological and theoretical issues. To gain hands-on experience with sound, you will spend some time listening, working with scores, reading spectrograms, and learning how to use sound analysis-editing software (see Mini-Project #1). By the end of Week 2, we will have established a useful set of tools and a working definition of "timbre"—albeit one that is highly contingent and that will continue to be amended throughout the semester.

Week 1, Sept. 8 – What is "Timbre"? Some First Principles

course overview, definition of terms, timbre as quality vs. carrier, perceptualization

- Podcast, episode # 1

Reading:

Michel Chion, "Dissolution of the Notion of Timbre," *differences* 22, nos. 2-3 (2011): 235–239.

Cornelia Fales, "The Paradox of Timbre," *Ethnomusicology* 46, no. 1 (2002): 56–95.

Kai Siedenburg and Stephen McAdams, "Four Distinctions for the Auditory 'Wastebasket' of Timbre," *Frontiers in Psychology* 8, no. 1747 (2017).

Further Reading:

David Blake, "Timbre," in *The Oxford Handbook of Critical Concepts in Music Theory*, eds. Alexander Rehding and Steven Rings, 136–159 (Oxford: Oxford University Press, 2019).

Isabella van Elferen, "Agency, Aporia, Approaches: How Does Musicology Solve a Problem Like Timbre?," *Contemporary Music Review* 36, no. 6 (2017): 483–485.

Week 2, Sept. 15 – Clarifications, Critiques, and Analytical Tools

disciplinary divides, scientific method, culture studies, sound analysis-editing software, spectrograms, microscopic vs. macroscopic representations

- Podcast, episode # 2
- **Due:** Module 1 Mini-Project – Working with sound analysis tools
  - Software downloads: Audacity, Sonic Visualiser, SPEAR

Reading:

Megan Lavengood, "The Cultural Significance of Timbre Analysis: A Case Study in 1980s Pop Music, Texture, and Narrative," *Music Theory Online* 26, no. 3, forthcoming in Fall 2020 (special thanks to Dr. Lavengood for providing an advance copy of her article!).

Stephen McAdams et al., "Analyzing Musical Sound," in *Empirical Musicology: Aims, Methods, Prospects*, eds. Eric Clarke and Nicholas Cook, 157–196 (Oxford: Oxford University Press, 2004).

Steve Waksman et al., "Review of 'Timbre is a Many-Splendored Thing'," *Journal of Popular Music Studies* 31, no. 1 (2019): 29–40.

Further Reading:
Robert Cogan, "Introduction" and "Images of Sonic Architecture," in *New Images of Musical Sound*, 1–43 (Cambridge: Harvard University Press, 1984).
Wayne Slawson, *Sound Color* (Berkeley: University of California Press, 1985).

Listening:
Maurice Ravel, *Boléro* (1928) – score | audio
Kraftwerk, "Die Roboter" (1978) – video
Inanga chuchoté ("whispering song") from Burundi – audio
1980s Pop/ Yamaha DX7 Synthesizer – Playlist

MODULE 2: Historical and Material Perspectives
For the most part, this module proceeds chronologically (excepting Week 3, which is transhistorical in scope), beginning with early associations of timbre as a physical carrier of the human voice and the sounds of acoustic instruments. From organology to orchestration, we will consider how an expanding instrumentarium allowed timbre to move to the foreground as a primary musical concern of 19th- and 20th-century composers. Along the way, we will encounter speaking machines, tuning-fork synthesizers, and stunning auditory chimeras. Mini-Project #2 provides an opportunity to apply what you've learned in a brief written analysis of a vocal or instrumental piece of your choosing.

Week 3, Sept. 22 – The Voice (and the Ear)
early modern conceptions of the voice, mouth- vs. ear-based theories of sound in the 19th century, speaking machines, voice synthesis, prosthetics
- Podcast, episode # 3

Reading:
Hermann von Helmholtz, excerpts from "Part I: On the Composition of Vibrations," in *On the Sensations of Tone as a Physiological Basis for the Theory of Music*, trans. Alexander Ellis, 1–25 and 103–119 (New York: P. Smith, 1948 [1863]).
Mara Mills, "Media and Prosthesis: The Vocoder, the Artificial Larynx, and the History of Signal Processing," *Qui parle* 21, no. 1 (2012): 107–149.
Benjamin Steege, excerpts from "Refunctioning the Ear" and "Refunctioning the Voice," in *Helmholtz and the Modern Listener*, 43–79 and 178–193 (Cambridge: Cambridge University Press, 2012).
Bettina Varwig, "Early Modern Voices," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).

Further Reading:
Nina Sun Eidsheim and Katherine Maizel, "Introduction: Voice Studies Now," in *The Oxford Handbook of Voice Studies* (Oxford: Oxford University Press, 2019).
Alexandra Hui, "Sound Materialized and Music Reconciled: Hermann Helmholtz," in *The Psychophysical Ear: Musical Experiments, Experimental Sounds, 1840–1910*, 55–87 (Cambridge: MIT Press, 2012).
Jonathan Sterne, "Machines to Hear for Them," in *The Audible Past: Cultural Origins of Sound Reproduction*, 31–86 (Durham: Duke University Press, 2003).

Amanda Weidman, "Voice," in *Keywords in Sound*, 232–245 (Durham: Duke University Press, 2015).

Listening:
Heinrich Schütz, "Anima mea liquefacta est" (1629) – audio | score
Speaking machines from Kempelen to Sawada – video montage
Vocoder – Playlist

Week 4, Sept. 29 – Organology and Instrumental Aesthetics
17th and 18th-century instrumental effects, musical tone ("timbre" *avant la lettre*), organology, re-orchestration techniques, orchestral growth
- Special guest: Deirdre Loughridge
- Podcast, episode # 4

Reading:
Emily Dolan, "Instruments and Aesthetics," "The Idea of Timbre," and "Haydn, Orchestration, and Re-Orchestration," in *The Orchestral Revolution: Haydn and the Technologies of Timbre*, 1–22 and 53–135 (New York: Cambridge University Press, 2013).
Deirdre Loughridge, "Timbre Before Timbre: Listening to the Effects of Organ Stops, Violin Mutes, and Piano Pedals ca. 1650–1800," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).
Peter Szendy and Will Bishop, "Organologics (1): The Erasure of Bodies," in *Phantom Limbs: On Musical Bodies*, 21–28 (New York: Fordham University Press, 2015).

Further Reading:
Rebecca Cypress, "Timbre, Expression, and Combination Keyboard Instruments: Milchmeyer's Art of *Veränderung*," *Keyboard Perspectives viii* (2015): 43–69.
Alexander Rehding, "Instruments of Music Theory," *Music Theory Online* 22, no. 4 (2016).
Curt Sachs, *The History of Musical Instruments* (New York: W. W. Norton and Company, 1940).
André Schaeffner, "Origins of Instruments in the Human Body," in *The Origin of Musical Instruments: An Ethnological Introduction to the History of Instrumental Music*, 1–21 (London: Routledge, 2020 [1936]).
John Tresch and Emily Dolan, "Toward a New Organology: Instruments of Music and Science," *Osiris* 28 (2013): 278–298.

Listening:
Timbre-Changing Devices – Playlist
Haydn Symphonies – Playlist

Week 5, Oct. 6 – Nineteenth-Century Orchestral Effects
more on instrumentation vs. orchestration, renovations and extensions to the acoustic instrumentarium, techne vs. episteme, romanticism
- Special guest: Alexander Rehding
- Podcast, episode # 5

Reading:

Hector Berlioz, "The Orchestra," in *Grand Traité d'Instrumentation et d'Orchestration Modernes*, trans. and w/ commentary by Hugh Macdonald, 319–335 (Cambridge: Cambridge University Press, 2002 [1855]).

Alexander Rehding, "Timbre/Techne," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).

Elizabeth Bradley Strauchen-Scherer, "Technology and Timbre: Features of the Changing Instrumental Soundscape of the Long Nineteenth Century," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).

Further Reading:

Francesca Brittan, "On Microscopic Hearing: Fairy Magic, Natural Science, and the Scherzo fantastique," *Journal of the American Musicological Society*, 64, no. 3 (2011): 527–600.

Nikolay Rimsky-Korsakov, "Composition of the Orchestra," from *Principles of Orchestration*, trans. Edward Agate, 97–118 (New York: Kalmus Orchestra Scores Inc., 1912 [1891]).

Music:

Hector Berlioz, *Symphonie fantastique* Op. 14, mvts. iv/v (1830) – score | audio (iv/v)

———, *Harold in Italy* op. 16 (1834) – score | audio

Wagner's re-orchestration of Beethoven Symphony No. 9, i (1824) – score | audio

Camille Saint-Saën, Piano concerto No. 5, ii (1896) – score | video

Week 6, Oct. 13 – Twentieth-Century Innovations in Timbre Composition

Klangfarbenmelodie, timbre-harmony, fusion and fission, timbre composition, *synthèse instrumentale*, *musique concrète*

- Special guest: Jennifer Iverson
- Podcast, episode # 6
- **Due:** Module Mini-Project #2 – Timbre Analysis/ Creation (acoustic)

Reading:

Robert Hasegawa, "Timbre as Harmony—Harmony as Timbre," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).

Jennifer Iverson, "The Emergence of Timbre: Ligeti's Synthesis of Electronic and Acoustic Music in *Atmosphères*." *Twentieth-Century Music* 7, no. 1 (2010): 61–89.

Further reading:

Robert Erickson, *Sound Structure in Music* (Berkeley: University of California Press, 1975).

Rebecca Leydon, "Clean as a Whistle: Timbral Trajectories and the Modern Musical Sublime," *Music Theory Online* 18, no. 2 (2012).

Eva McMullan-Glossop, "Hues, Tints, Tones, and Shades: Timbre as Color in the Music of Rebecca Saunders," *Contemporary Music Review* 36, no. 6 (2017): 488–529.

Pierre Schaeffer, *Treatise on Musical Objects: An Essay Across Disciplines* (Berkeley: University of California Press, 2017 [1966]).

Arnold Schoenberg, excerpt from "Chords with Six or More Tones," in *Theory of Harmony*, trans. Roy Carter, 418–422 (Berkeley: University of California Press, 1983 [1911]).
Simon Waters, "Timbre Composition: Ideology, Metaphor, and Social Process," *Contemporary Music Review* 10, no. 2 (1994): 129–134.

Music:
Hasegawa and Iverson Examples – Playlist

MODULE 3: Timbre, Sound Synthesis, and the Digital Revolution

Our third module begins with the legacy of "timbre space," a psychoacoustic model of listening perception that emerged in the mid-sixties alongside digital analysis-synthesis programs. We will see how this model has been encapsulated in the information infrastructure of recent assisted orchestration software, digging into the classifications systems and formatting standards that codify how timbre is represented in new media. In addition, we will consider some aspects of listening which complicate the timbre-space model, including embodiment, semantics, and affect. By the end of Week 9, we will have a better understanding of how scientific discourse on timbre is intertwined with sound technologies and contemporary compositional practices. Mini-Project #3 involves analyzing/creating a short piece that explores some of the problems and possibilities digital sound poses for traditional theories of musical timbre.

Week 7, Oct. 20 – Mapping "Timbre Space"
psychoacoustics, cognitive structuralism, multi-dimensional scaling techniques, institutional networks, early synthesis programs, post-spectralism
- Special guest: Stephen McAdams
- Podcast, episode # 7

Reading:
Georgina Born, "Science, Technology, the Music Research Vanguard," in *Rationalizing Culture: IRCAM, Boulez, and the Institutionalization of the Avant-garde*, 180–200 (Berkeley: University of California Press, 1995).
Stephen McAdams, "Musical Timbre Perception," in *The Psychology of Music*, ed. Diana Deutsch, 35–67 (Elsevier Academic Press, 2013).
Landon Morrison, "Encoding Post-Spectral Thought: Kaija Saariaho's Early Electronic Works at IRCAM, 1982–1987," draft of article in progress.
Kaija Saariaho, excerpts from "Timbre and Harmony: Interpolations of Timbral Structures," *Contemporary Music Review* 2, no. 1 (1987): 93–133.

Further Reading:
Stephen McAdams and Kaija Saariaho, "Qualities and Functions of Musical Timbre," *Proceedings of the International Computer Music Conference* (1985): 367–374.
Reinier Plomp, "Introduction (or, Four Scientific Biases in Hearing Research)," in *The Intelligent Ear: On the Nature of Sound Perception*, 1–11 (Mahwah, NJ: Lawrence Erlbaum Associates, Inc., 2002).

Jean-Claude Risset and David Wessel, "Exploration of Timbre by Analysis and Synthesis," in *The Psychology of Music 2nd Edition*, 113–169 (New York: Academic Press, 1999).

Music:
Kaija Saariaho's early electronic works at IRCAM, 1982–87
- *Vers le blanc* (1982) for computer-generated sound recorded to tape – audio
- *Io* (1987) for ensemble with live electronics – audio | score

Week 8, Oct. 27 – Assisted Orchestration Software
Orchidea and the ACTOR Project, MIR-based instrumental synthesis, low-level audio features, high-level semantic descriptors, transducing/ transcoding, machine-learning
- Podcast, episode # 8

Reading:
Geoffrey Bowker and Susan Leigh Star, "Some Tricks of the Trade in Analyzing Classification," in *Sorting Things Out: Classification and Its Consequences*, 33–50 (Cambridge: MIT Press, 1999).
Grégoire Carpentier and Jean Bresson, "Interacting with Symbol, Sound, and Feature Spaces in Orchidée, a Computer-Aided Orchestration Environment," *Computer Music Journal* 34, no. 1 (2010): 10–27.
Landon Morrison, "Formatting Timbre: Assisted Orchestration Software and the ACTOR Network," draft of article in progress.

Further Reading:
Michael Clarke, "Interactive aural analysis of Jonathan Harvey's *Mortuos Plango, Vivos Voco*." Mac OS X only: download "Tiger updates" and follow instructions.
Nicolas Donin, "Sonic Imprints: Instrumental Resynthesis in Contemporary Composition," in *Musical Cultures of the Twentieth Century: Musical Listening in the Age of Technological Reproduction*, 323–341 (Farnham: Routledge, 2016).
Jonathan Harvey, "*Mortuos Plango, Vivos Voco:* A Realization at IRCAM." *Computer Music Journal* 5, no. 4 (1981): 22–24.
Gilbert Nouno et al., "Making an Orchestra Speak," in *Proceedings of the Sound and Music Computing Conference* (2009).
Xavier Serra, "A Multicultural Approach in Music Information Research," *Proceedings of 12th International Society of Music Information Retrieval Conference* (2011): 151–156.
Laura Zattra, "Symmetrical Collaborations: Jonathan Harvey and his Computer Music Designers," *Nuove Musiche* (2018): 29–58.

Music:
Jonathan Harvey first and last works at IRCAM:
- *Mortuos Plango, Vivos Voco* (1980) for 8-track tape – audio | archival materials
- *Speakings* (2008) for orchestra with live electronics – audio | score

Week 9, Nov. 10 – Semantics, Affect, Corporeality
embodied cognition, ecological perception, semantics, signification, affect, vibration
- Special guest: Zachary Wallmark
- Podcast, episode # 9
- **Due:** Module Mini-Project #3 – Timbre Analysis/ Creation (electronic)

Reading:
Isabella van Elferen, "Timbrality: The Vibrant Aesthetics of Tone Color," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).
Charalampos Saitis and Stefan Weinzierl, "The Semantics of Timbre," in *Timbre: Acoustics, Perception, Cognition*, 119–150 (Cham, Switzerland: Springer, 2019).
Zachary Wallmark et al., "Embodied Listening and Timbre: Perceptual, Neural, and Acoustic Correlates," *Music Perception* 35, no. 3 (2018): 332–363.

Further Reading:
Rafael Ferrer, "Timbral Environments: An Ecological Approach to the Cognition of Timbre," *Empirical Musicology Review* 6, no. 2 (2011): 64–74.
John Hajda et al., "Methodological Issues in Timbre Research," in *Perception and Cognition of Music* 253–306 (New York: Taylor and Francis, 1997).
Zachary Wallmark, "A Corpus Analysis of Timbre Semantics in Orchestration Treatises," *Psychology of Music* 47, no. 4 (2019): 585–605.
Zachary Wallmark and Roger Kendall, "Describing Sound: The Cognitive Linguistics of Timbre," in *The Oxford Handbook of Timbre* (Oxford: Oxford University Press, 2018).

Music:
Elferen and Wallmark – Playlist

MODULE 4: Timbre Representation in Media, Culture, and Politics
The final stretch of this seminar reframes our discussion of timbre in light its intersections with race, gender, and ethnicity. We will analyze timbre's entanglement with identity across a diverse range of musical styles, with a special emphasis on popular and non-Western repertoire. Additionally, in Weeks 10 and 11, we will shift from shorter texts to in-depth engagements with two recent books—Nina Sun Eidsheim's *The Race of Sound* and Robert Fink et al.'s *Relentless Pursuit of Tone*, respectively. Everyone is responsible for reading the former on their own (plan ahead!), while the latter is a collected volume with chapters that can be divvied up, with everyone reading the Introduction and Afterword, plus two other chapters of their choice (sign-up in advance). In lieu of a fourth Mini-Project, you will focus on completing your final project, due Dec. 14   .

Week 10, Nov. 17 – Timbre, Race, and the Micro-Politics of Listening
cultural identity, vocality, listening-to-listening framework, anti-essentialism
- Special guest: Nina Sun Eidsheim
- Podcast, episode # 10

Reading:
Nina Sun Eidsheim, *The Race of Sound: Listening, Timbre, and Vocality in African American Music* (Durham: Duke University Press, 2019).

Further reading:
Grant Olwage, "The Class and Colour of Tone: An Essay on the Social History of Vocal Timbre," *Ethnomusicology Forum* 13, no. 2 (2004): 203–226.
Jennifer Lynn Stoever, *The Sonic Color Line* (New York: New York University Press, 2016).
Alexander G. Weheliye, "'Feenin': Posthuman Voices in Contemporary Black Popular Music," *Social Text* 71, no. 20/2 (2002): 21–47.

Music:
Eidsheim Examples – Playlist

Week 11, Nov. 24 – Analyzing Timbre / Tone in Popular Music
tone vs. timbre, genre, instruments, cultural signification, copyright, commodity fetishism, recording technologies, studio production techniques
- Special guest: Robert Fink
- Podcast, episode # 11

Reading:
Robert Fink, Melinda Latour, and Zachary Wallmark, eds. *The Relentless Pursuit of Tone: Timbre in Popular Music* (Oxford: Oxford University Press, 2018).

Further reading:
David Blake, "Timbre as Differentiation in Indie Music," *Music Theory Online* 18, no. 2 (2018).
Dana Gooley, "Jazz Piano Pedaling and the Production of Timbral Difference," *Keyboard Perspectives vi* (2013): 101–126.
Kate Heidemann, "A System for Describing Vocal Timbre in Popular Song," *Music Theory Online* 22, no. 1 (2016).
Brad Osborn, "Timbre," in *Everything in Its Right Place: Analyzing Radiohead*, 93–132 (New York: Oxford University Press, 2016).
Catherine Provenzano, "Making Voices: The Gendering of Pitch Correction and the Auto-Tune Effect in Contemporary Pop Music," *Journal of Popular Music Studies* 31, no. 2 (2019): 63 – 84.
Gabriel Solis, "Timbral Virtuosity: Pharoah Saunders, Sonic Heterogeneity, and the Jazz Avant-garde in the 1960s and 70s," *Jazz Perspectives* 9, no. 1 (2015): 47–63.

Music:
Relentless Pursuit of Tone Examples – Playlist

Week 12, Dec. 1 –Timbre and Identity in "World" Music
transcription, problems of representation, non-Western conceptions of tone, studio politics, settler colonial perceptions, critical listening positionality
- Podcast, episode # 12

Reading:
Theodore Levin and Valentina Süzükei, "Timbre-Centered Listening in the Tuvan
    Soundscape," in *The Oxford Hand- book of Timbre* (New York: Oxford University
    Press, 2018). NOTE: read online to access music examples.
Louise Meintjes, excerpts from *Sound of Africa! Making Music Zulu in a South African
    Nation* (Durham: Duke University Press, 2003).
Michael Tenzer, "Timbre and Polyphony in Balinese Gamelan," in *The Oxford Hand-
    book of Timbre* (New York: Oxford University Press, 2018).

Further Reading:
Lou Bunk, "Timbre-and-Form: the BSC and the Boston Improvising Community," in
    Analytical and Cross-Cultural Studies in World Music, 225–262 (New York:
    Oxford University Press, 2011).
Michael Gardiner and Joyce Lim, "Chromatopes of Noh: An Analysis of Timbral
    Progressions in the Introductions to Three Plays," in *Asian Music* 45, no. 2
    (2014): 84–128.
John Latartara, "The Timbre of Thai Classical Singing," in *Asian Music* 43, no. 2 (2012):
    88–114.
Theodore Levin and Michael Edgerton, "The Throat Singers of Tuva," *Scientific
    American* 281, no. 3 (1999): 80–87.
Dylan Robinson, "Introduction: Writing Indigenous Space," in *Hungry Listening:
    Resonant Theory for Indigenous Sound Studies* (Minneapolis: University of
    Minnesota Press, 2020).

Music
Sounds of Africa! Examples – Playlist

*** Dec. 4ᵗʰ – Peer-Review Session for Final Project Proposals ***

Readings and Other Course-related Materials: all required materials for this
course will be available on Canvas. In deciding what to include, I have tried to source
materials from a representative cross-section of disciplines involved in timbre studies,
encouraging you to engage with the discursive positions occupied by authors operating
in different academic arenas. For those interested, I have also included supplementary
sources in the "further reading" sections and in an extended bibliography—these are *not*
required, but rather intended as a starting point for anyone who wants to explore a
particular topic in greater detail.

NOTE: Bibliographies for a seminar such as this one have a tendency to balloon, and
here is no exception; indeed, even without the "further reading" suggestions, there is a
good amount of reading for this seminar. This means you need to be able to read texts
quickly for ideas and content—for tips on speeding things up, I'd recommend starting
with Paul Edwards's article, "How to Read a Book," and then checking out some of the
other sources provided on the "Reading and Writing Self-Help" page on Canvas.

As an aid for navigating the assigned materials each week, I will produce a short **"Timbre at the Crossroads" podcast** (ca. 5-10 min.), posting new episodes every Friday so you have time to reflect on any questions I ask before submitting responses for the next week's class. I'm not promising the next "Radio Lab," but I will try to make these podcasts fun and engaging, taking advantage of the genre's acousmatic affordances to peak your interests in the timbral topic du jour. My goal is to offer a broad overview of the ideas put forward in the readings, along with context about the authors, their disciplinary perspectives, and how they fit into the larger trajectory of topics covered in this seminar.

Technology Policy: in light of our distance-learning situation, it goes without saying that technologies will play an indispensable role in this seminar, with Zoom software replacing the classroom as our weekly "gathering space." Despite occurring virtually, however, it is important that we try to maintain the same sense of community and collegiality we would have on campus. With this in mind, please treat our weekly Zoom sessions as if they were regular, in-person meetings—i.e., be present, ready to participate, making sure in advance that you have a quiet place to focus and a decent internet connection (let me know if this is a problem, we will figure out a solution). Outside of Zoom, we will use Slack channels for weekly responses to the readings (see "reviewer" and "responder" roles below), as well as in-class activities, group projects, and whatever else is deemed fit for conversation. I am new to Slack, but I am optimistic that it will offer a user-friendly platform for exchanges that can act as a springboard for our in-class discussions.

Grading Policy Summary

Participation (20%): in a small seminar like this, it is important that everyone shows up to meetings ready to contribute to group discussion, having taken adequate time to read, listen, and reflect on the assigned materials. Ultimately, the class experience will be what we make of it, so let's all do our part to have well-informed, thought-provoking conversations and to establish a respectful and lively "classroom" dynamic.
Each week, students will rotate among **three different roles** in our meetings: *reviewers*, *responders*, **and** *scouts*. A sign-up sheet will circulate in Weeks 1-2, allowing you to schedule when you would like to perform different roles this semester.

- *Reviewers*: two students will post individual reviews (ca. 500 words) to the assigned materials by 5 p.m. the day before class, presenting a summary of what they consider to be the most important take-aways, as well as other thoughts, questions, or critiques they hope to pursue in group discussion
- *Responders*: all other students will read the assigned texts and the two reviews written by their peers before posting *at least one* reply (ca. 50-100+ words)
- *Scouts*: one student each week will expand the scope of our discussions by bringing something to class for show-and-tell; suitable objects should be outside of, but relevant to, the weekly topics, and might include things like recordings, films, scores, analytical graphs, instruments, original compositions, etc.

In addition, as part of participation each week, we will collectively take notes during class sessions, using the Zoom chat function to document central themes, questions for further study, and any external references mentioned in the course of discussion. After class, I will use the transcript of our chat session to create a short (ca. 1-pg) document to be posted under the "Class Minutes" channel on Slack.

<u>Modular Mini-Projects (3 @ 10% = 30%)</u>: small projects at the end of Modules 1-3 allow you to apply new concepts and skills by working either individually *or* in pairs. The first of these (see Week 2) introduces an analytical toolkit that we will continue to build on throughout the term; the second (see Week 6) gives you a chance to apply these tools in an analysis/creation of an acoustic piece in a style of your choosing; and the third (see Week 9) asks you to consider timbre in the context of digitally mediated sound. Collectively, these mini-projects will help you build up to the final project, which will become the exclusive focus of the fourth and final module.

<u>Final Project (50%)</u>: for an end-of-term project, you will research and write an essay on a topic of your choosing, so long as it is in the spirit of ideas and methods covered in this class. The primary purpose of this project is to synthesize what you've learned, producing a piece of scholarship that can be further developed after the seminar is finished. You have the option of either submitting a conventional term paper (ca. 3,500–5,000 words) or converting your argument into an alternative format, such as a conference presentation, podcast, vlog, or website (ca. 2,500–3,000 words, plus slide presentation with audio-visual examples). **By Friday, November 13, you should submit a proposal for your project**, including a brief description (ca. 500 words), a 1-page bibliography, and up to 3 pages of supplementary examples (e.g., scores, spectrograms, graphs). These will be exchanged in class for a **peer review exercise** and I will provide written feedback in a private email. **Final projects are due Monday, December 14** and can be submitted either via email or directly on the Canvas website.