MUTH 652: Seminar in Music Theory—Theorizing Timbre Schulich School of Music of McGill University, Fall 2019 Robert Hasegawa (robert.hasegawa@mcgill.ca) Office hours by appointment (Wirth Music Building, A-611) Thursday 1:35-4:25, Wirth Music Building A-410 (music library)

Long dismissed as a "secondary parameter," timbre has become increasingly central to contemporary musical practice and scholarship. This seminar will confront the challenges of conceptualizing timbre and orchestration through analysis of musical works (mostly from the past fifty years), study of theories and treatises, and discussion of recent research in music theory, musicology, and music cognition. Coursework includes weekly listening and analysis, short written assignments, inclass presentations, and a final analytical paper.

Weekly schedule

1 Thursday, September 5: course introduction

In-class discussion and analysis: What is timbre? How does timbre contribute to the experience of musical listening? Anton Webern (1883–1945), Fünf Stücke für Orchester, op. 10, v. Sehr fliessend (1913) score | recording

2 Thursday, September 12: visualizations (1/2): spectrograms

Assignments (submit on myCourses by midnight on Wednesday, September 11)

1. Analysis: Study Czernowin's *Sahaf* from the perspective of timbre, and write a short analytical essay (500–750 words). What kinds of timbral relationships are formed between the members of the quartet? What compositional techniques and strategies bring the timbral features of the diverse individual instruments of the quartet (saxophone, electric guitar, percussion, and piano) into communication with each other? Cite specific examples from the score by measure number in support of your conclusions.

• Chaya Czernowin, *Sahaf* (2008) score | recording (audio starts at 0:36) | YouTube (with scrolling score) 2. Reading response: Comment on the assigned article by Michael Clarke in a brief response essay (400–600 words). What do you find useful, informative, or compelling about the author's analysis? Are there any aspects of the article that you would critique or significant features of the music that go unaddressed? Does the author's methodology effectively engage with the work in question?

• Michael Clarke, "Jonathan Harvey's *Mortuos Plango, Vivos Voco.*" In *Analytical methods of electroacoustic music*, ed. Mary Simoni, 111–143. New York: Routledge, 2006.

• Jonathan Harvey (1939–2012), *Mortuos Plango, Vivos Voco* (1980) recording | spectrogram (SPEAR screenshots) **Readings (to be read carefully before this week's seminar meeting)**

Kai Siedenburg and Stephen McAdams. "Four conceptual distinctions for the auditory 'wastebasket' of timbre." Frontiers in Psychology 8/1747 (2017).

Stephen McAdams, "Analyzing Musical Sound." In *Empirical Musicology*, ed. Eric Clarke and Nicholas Cook. Oxford: Oxford University Press, 2004.

Jonathan Harvey, "Mortuos Plango, Vivos Voco: A Realization at IRCAM." Computer Music Journal 5/4 (1981): 22–24. Additional reading/resources (optional)

Chaya Czernowin, "The Other Tiger." Lecture at the Réseau Varèse Konferenz, Berlin, 2007.

————. "A Few Examples from MAIM: How This Music Thinks." In *Facets of the Second Modernity,* ed. Claus-Steffen Mahnkopf, Frank Cox, and Wolfram Schurig. Hofheim: Wolke Verlag, 2008. Read only 99–106.

Bruno Bossis, "Analyse de Mortuos plango, vivos voco de Jonathan Harvey." Online resource: Oeuvres commentées du répertoire de l'IRCAM.

Michael Clarke, "Interactive aural analysis of Jonathan Harvey's *Mortuos Plango, Vivos Voco.*" Mac OS X only: download "Tiger updates" folder and follow installation instructions.

SPEAR ("Sinusoidal Partial Editing Analysis and Resynthesis"): downloads available for Mac and Windows

Amadeus Pro: downloadable for Mac only. Audio editor with useful spectrogram interface

Sonic Visualiser (spectrogram analysis and other tools): downloads available for Mac and Windows.

Online demo of Fourier series analysis/synthesis

Video: "But what is the Fourier Transform? A visual introduction." 3Blue1Brown, 2018.

Conversion of frequencies to pitches (and vice versa): Google spreadsheet | table

3 Thursday, September 19: visualizations (2/2): symbolic approaches to timbre and sound object Assignments (submit on myCourses by midnight on Wednesday, September 18)

1. Analysis: Using spectrogram analysis software of your choice, such as Amadeus Pro, Sonic Visualiser or Acousmographe (SPEAR is not recommended for the noisy timbres of this piece), make a spectrogram of Lachenmann's *Pression* using the recording by Lauren Radnofsky below. You'll need to convert the m4a format file into an AIFF or WAV version before proceeding to the analysis. In a short essay (500–750 words), comment on what you see in the spectrogram and any insights that this mode of visualization offers towards your understanding of the piece. Integrate into your essay at least one screenshot of an excerpt of your spectrogram (including the labels from the time and frequency axes).

• Helmut Lachenmann, Pression (1969) score | recordings: Devoto, Radnofsky | YouTube (video of selected excerpts)

2. Reading response: Comment on the assigned article by Lasse Thoresen in a brief response essay (400–600 words). As for last week's response to Michael Clarke, consider both positive and problematic aspects of the article, and evaluate the effectiveness of this methodology in analyzing the work by Parmerud. If you like, speculate on the utility of Thoresen's analytical tools for other repertoires: what kinds of musical works might be good subjects for this approach to analysis?

 Lasse Thoresen, "Sound-objects, Values and Characters in Åke Parmerud's Les objets obscurs, 3rd Section." Organised Sound 14/3 (2009): 310–320.

• Åke Parmerud (1953-), Les objets obscurs, 3rd Section (1991) recording | translation of spoken text **Readings**

Helmut Lachenmann, "Hearing [Hören] is Defenseless—without Listening [Hören]: On Possibilities and Difficulties." *Circuit: musiques contemporaines* 13/2 (2003): 27–50. Read only 27–38, with particular attention to the Webern analysis, and listen carefully to the Webern movement: Fünf Stücke für Orchester, op. 10, iv. Fliessend, ausserst zart (1913) score | recording.

Lasse Thoresen with Andreas Hedman. "Spectromorphological analysis of sound objects: an adaptation of Pierre Schaeffer's typomorphology." Organised Sound 12/2 (2007): 129–41.

Additional reading/resources (optional)

Ming Tsao, "Helmut Lachenmann's 'Sound Types'." *Perspectives of New Music* 52/1 (2014): 217–38. Read only 217–226. Helmut Lachenmann, three essays from *Musik als existentielle Erfahrung: Schriften* 1966-1995 (Breitkopf & Härtel, 2004):

"Klangtypen der neuen Musik," "Bedingungen des Materials," "Vier Grundbestimmungen des Musikhörens." Denis Smalley, "Defining timbre—Refining timbre." *Contemporary Music Review* 10/2 (1994): 35–48.

———. "Spectromorphology: explaining sound-shapes." Organised Sound 2/2 (1997): 107–26.

Pierre Schaeffer, *Treatise on Musical Objects*. Translated by Christine North and John Dack. Oakland: University of California Press, 2017.

Website with examples of Schaeffer's TARTYP: www.prisedesoncreative.com/fr

Stéphane Roy, "Form and Referential Citation in a Work by Francis Dhomont." Organised Sound 1/1 (1996): 29-41. Francis Dhomont (1926-), Points de Fuite (1982) recording

Additional tools: annotation software (eAnalysis, Acousmographe), audio descriptors in MATLAB (MIR Toolbox, Timbre Toolbox)

4 Thursday, September 26: perceptual approaches to orchestration

Assignments (submit on myCourses by midnight on Wednesday, September 25)

1. Analysis: Choose an excerpt of 60 seconds from Natasha Barrett's *Little Animals* and make a graphic analysis describing what you find most significant in the passage. You can use Thoresen's symbols, any other existing system of analytical notation, or a symbolic vocabulary of your own devising. While you may refer to Barrett's graphic score in Figure 2 of her article, you're encouraged to develop an independent analytical viewpoint. Your analysis doesn't need to be publication-ready: handwritten sketches are acceptable as long as they're clear and legible. Make sure that you clearly indicate timings showing where the events that you describe fall in the piece as a whole. Upload your graphic analysis with a short accompanying text of 250–500 words (preferably as a single document), explaining your analytical findings and (if necessary) how to understand the image.

• Natasha Barrett, Little Animals (1997) recording

2. Reading response: As for previous reading responses, write a brief response essay (400–600 words) on the assigned article by Touizrar and McAdams. Note that you don't need to summarize the whole of the article: your response can focus on selected examples or the overall methodology. Listening on your own is essential: does your own hearing of these excerpts match the interpretations proposed in the article?

• Moe Touizrar and Stephen McAdams. "Perceptual aspects of the orchestration in *The Angel of Death* by Roger Reynolds: Timbre and auditory grouping." In P. Lalitte (ed.), *Analyse musicale et perception. Actes des Journées d'Analyse Musicale 2016*, Editions universitaires de Dijon, in press. Musical examples: 1 2 3 4 5 6 7 8 9 10 11

• Roger Reynolds (1934–), The Angel of Death (1998–2001) score (section S only) | recording (section S starts at

• Roger Reynolds (1934–), The Angel of Death (1998–2001) score (section S only) | red 16:57)

Readings

Natasha Barrett, *"Little Animals:* Compositional Structuring Processes." *Computer Music Journal* 23/2 (1999): 11-18. Meghan Goodchild and Stephen McAdams, "Perceptual Processes in Orchestration." In *The Oxford Handbook of Timbre*,

edited by Emily I. Dolan and Alexander Rehding. New York: Oxford University Press, 2018. Stephen McAdams, "The perceptual representation of timbre." In K. Siedenburg, C. Saitis, S. McAdams, A. Popper & R. Fay

(eds.), *Timbre: Acoustics, Perception, and Cognition,* 23–58. Cham, Switzerland: Springer, 2019. Read 23–38 only. Additional reading/resources (optional)

Stephen McAdams, "Psychological constraints on form-bearing dimensions in music." Contemporary Music Review 4/1 (1989): 181–98.

——. "Timbre as a structuring force in music." In K. Siedenburg, C. Saitis, S. McAdams, A. Popper & R. Fay (eds.), *Timbre: Acoustics, Perception, and Cognition,* 211–44. Cham, Switzerland: Springer, 2019.

Stephen McAdams and Meghan Goodchild, "Musical structure: Sound and timbre." In R. Ashley & R. Timmers (eds.), Routledge Companion to Music Cognition, 129–39, New York: Routledge, 2017.

5 Thursday, October 3: texture and sound mass

Assignments (submit on myCourses by midnight on Wednesday, October 2)

1. Analysis: In a short essay (400-600 words), discuss Julia Wolfe's *Big Beautiful Dark and Scary* from the perspective of timbre. How does timbre evolve over the course of the piece? What kinds relationships exist between instruments, and how do they contribute to a sense of the ensemble's overall sound? You can draw freely on the readings assigned this week or earlier in the course, or take an independent approach. This piece is featured on the Sunday, October 6 McGill CME concert, 9:00pm at the Sala Rossa (4848 boul. St-Laurent): attendance is encouraged but not required. You can also sit in on rehearsals: Monday, September 30, 9:05–11:25 or Friday, October 4, 9:05–11:25, both in Pollack Hall.

• Julia Wolfe (1958–), *Big, Beautiful, Dark and Scary* (sextet version, 2002) score | recording 2. Reading response: As for previous reading responses, write a brief response essay (400–600 words) on the assigned article by Jennifer Iverson on Ligeti's *Atmosphères*. You do not need to summarize every point of the article, but are encouraged to read closely and engage in detail with examples and arguments.

• Jennifer Iverson, "The Emergence of Timbre: Ligeti's Synthesis of Electronic and Acoustic Music in *Atmosphères.*" *Twentieth-Century Music* 7/1 (2010): 61–89.

• György Ligeti (1923–2006), Atmosphères (1961) score | recording

Readings

Jennifer Iverson, "Historical Memory and György Ligeti's Sound-Mass Music 1958–1968." PhD dissertation, University of Texas at Austin, 2009. Read only Chapter 4: "*Klangfarbenmelodie* amongst the Darmstadt Circle," 144–91.

Cornelia Fales, "The Paradox of Timbre." *Ethnomusicology* 46/1 (2002): 56–95. (OPTIONAL: see also Cornelia Fales's keynote lecture at the 2018 McGill Timbre Conference here.)

Zachary Wallmark and Roger A. Kendall, "Describing Sound: The Cognitive Linguistics of Timbre." In *The Oxford* Handbook of Timbre. New York: Oxford University Press, 2018.

Additional reading/resources (optional)

Amy Bauer, "Composing the Sound Itself: Parameters and Structure in the Music of Ligeti." Indiana Theory Review 22/1 (2001), 37–64.

6 Thursday, October 10: guest lectures by ACTOR postdocs Julie Delisle and Jason Noble, topics and readings TBA Assignment (submit on myCourses by midnight on Wednesday, October 9)

"Amazing Moment in Timbre" web essay: Choose a passage from a musical work of your choice (any genre or style is acceptable) and describe what's unique or striking about its timbre(s) in a short essay of 500–750 words. What perceptual or theoretical concepts can be applied to understand the significant timbral features of this music? Are there particular compositional strategies in use that achieve these timbral effects? Your essay can model itself on the shorter blog entries online at the ACTOR Project website: as in these blog entries, you can use graphics and/or video excerpts to convey your observations to a broad, non-specialist audience. Particularly successful essays may be selected for publication on the ACTOR webpage (with your permission).

7 Thursday, October 17

Assignments (submit on myCourses by midnight on Wednesday, October 16)

1. Analysis: Choose one of the three movements of Varèse's *Octandre* (to be played on the November 1 McGill Wind Orchestra concert), and write an analytical essay (400–600 words) discussing the timbral relationships you hear in the movement and how they contribute to local orchestral effects and/or a larger sense of form.

• Edgard Varèse (1883–1965), Octandre (1923) score | recordings I II III

2. Reading response: Write a brief response essay (400–600 words) on Rebecca Leydon's article on George Crumb's *Black Angels* (on the Université de Montréal Ensemble de musique contemporaine concert, December 3). Consider both Leydon's theoretical approach and her analysis of "timbral trajectories" in *Black Angels*.

• Rebecca Leydon, "Clean as a Whistle: Timbral Trajectories and the Modern Musical Sublime." Music Theory Online 18/2 (2012).

• George Crumb (1929–), *Black Angels* (1970) score | recording (YouTube)

Readings

Edgard Varèse and Chou Wen-chung, "The Liberation of Sound." *Perspectives of New Music* 5/1 (1966): 11–19. Zachary Wallmark, "Appraising Timbre: Embodiment and Affect at the Threshold of Music and Noise." PhD diss., UCLA,

2014. Chapter 1: "The Bodily Basis of Timbral Reactions and Appraisals."

Additional reading/resources (optional)

Emily Dolan, *The Orchestral Revolution: Haydn and the Technologies of Timbre*. Cambridge and New York: Cambridge University Press, 2013. Chapter 3, "Haydn, orchestration, and re-orchestration," 90–135. See also the graphs on the book website and Orcheil, a tool for automated visualizations of orchestration.

8 Thursday, October 24

Assignments (submit on myCourses by midnight on Wednesday, October 23)

1. Analysis: Consider the use of timbre and orchestration in the first 5:08 (measures 1–72) of Liza Lim's *Pearl, Ochre, Hair String* (2010), and describe what you find most significant in a short analytical essay (400–600 words). You can present your findings in text alone, or supplement your writing with analytical figures or annotated score pages.

• Liza Lim (1966–), Pearl, Ochre, Hair String (2010) score | recording

2. Short abstract/proposal for final presentation and paper—a text of no more than 350 words describing your topic and the analytical questions you plan to answer. If you like, you can use this as an exercise in writing a conference paper proposal.

Richard Steinitz, *György Ligeti: Music of the Imagination* (London: Faber and Faber, 2003): Chapters 3 and 4, 72–113. Read only 84–95 and 106–113.

See Joseph Straus's "Presenting at a Conference" for a guide—the section "Writing the proposal: Six generic conventions" is particularly useful (though at this early stage it's fine if you do not yet have the "specific results" of Step 5). *Readings*

Liza Lim, "Patterns of Ecstasy." Darmstädter Beiträge zur neuen Musik 21 (2012): 27-43.

Michael Rofe, "Capturing Time and Giving it Form: Nymphéa." In *Kaija Saariaho: Visions, Narratives, Dialogues,* edited by Jon Hargreaves, 81–105. London: Routledge, 2011.

• Kaija Saariaho (1952–), Nymphea (1987) score | recording | program note

Kaija Saariaho, "Timbre and harmony: Interpolations of timbral structures." Contemporary Music Review 2/1 (1987): 93– 133.

Stephen McAdams and Kaija Saariaho, "Qualities and Functions of Musical Timbre." In *Proceedings of the International Computer Music Conference 1985,* 367–374. San Francisco: Computer Music Association, 1985.

Additional reading/resources (optional)

Liza Lim (1966-), *Invisibility* (2009) score | recording: part 1 | part 2 | YouTube: part 1 | part 2

Tim Rutherford-Johnson, "Patterns of Shimmer: Liza Lim's Compositional Ethnography." Tempo 65/258 (2011): 2-9.

9 Thursday, October 31

Assignments (submit on myCourses by midnight on Wednesday, October 30)

1. Analysis: Write a short analytical essay on Saariaho's *Notes on Light* (featured in the ensemble version on the November 30 McGill CME concert), focusing on movement 3, "Awakening." As in previous analysis essays, your primary focus should be on the dimensions of timbre and orchestration (though of course you're welcome to discuss how these interact with other parameters). Optionally, you can draw on Saariaho's essay "Timbre and Harmony" or compare her compositional approach in *Notes on Light* to a work of the 1980s like *Nymphea*.

• Kaija Saariaho (1952–), Notes on Light (2006) score | recordings: I II III IV V | program note

2. Reading response: In a departure from previous weeks, this reading response focuses on a lecture by Rebecca Saunders on her own composition, *Fury II*. You can comment on both the lecture and the composition, as well as the relationship between the two. What novel ideas about timbre does Saunders propose? Do the concepts expressed in the lecture help you to make sense of *Fury II*?

- Lecture by Rebecca Saunders on *Fury II,* ManiFeste-2016. Transcript.
- Rebecca Saunders (1967–), Fury II (2009) score | recording | YouTube (Ensemble Linea)

Readings

Eva McMullan-Glossop, "Hues, Tints, Tones, and Shades: Timbre as Colour in the Music of Rebecca Saunders." Contemporary Music Review 36/6 (2017): 488–529.

Additional reading/resources (optional)

Rebecca Saunders, Fury (2005) score | recording

Composition class by Rebecca Saunders, ManiFeste-2016. Transcript.

Kaija Saariaho (1952–), NoaNoa (1992) score | recording | program note

Grégoire Lorieux, "Analyse de NoaNoa." Online resource: Oeuvres commentées du répertoire de l'IRCAM. English translation.

Taina Riikonen, "Shaken or Stirred—Virtual reverberation spaces and transformation gender identities in Kaija Saariaho's NoaNoa (1992) for flute and electronics." Organised Sound 8/1 (2003): 109–115.

10 Thursday, November 7

Assignments (submit on myCourses by midnight on Wednesday, November 6)

1. Analysis: Choose an aspect of the timbral organization and/or orchestration of *Skin* by Rebecca Saunders that you find important, and discuss it in a short essay of 400–600 words. You do not need to cover the whole piece, and can choose to focus your essay on a particular feature of the work (for example, vocal technique or recurring instrumental/vocal combinations) rather than aiming for an exhaustive overview. You have the option of referencing the composer's 2018 lecture at IRCAM (see below) or taking an entirely independent approach in your analysis.

• Rebecca Saunders (1967–), Skin (2015–16) score | online score | SoundCloud | recording

- Simon Cummings, Review of *Skin* (includes full text). 5against4.com, 31 March 2018.
- Lecture by Rebecca Saunders on Skin, ManiFeste-2016. Transcript.

2. Reading response: As in previous weeks, this reading response (400–600 words) focuses on an analytical article: Catherine Tognan's study of Hurel's *Leçon des choses*. In your response essay, discuss the effectiveness of the author's methodology and identify significant issues raised by this analysis (whether or not they are resolved in the article!).

Catherine Tognan, "Leçon des choses : analyse." In Philippe Hurel, Cahiers de l'IRCAM 5. Paris: IRCAM, 1994, 43–70. English translation.

Philippe Hurel (1955–), Leçon de choses (1993) score | recording | notes

Readings

Robert Hasegawa, "Timbre as Harmony—Harmony as Timbre." Forthcoming in *The Oxford Handbook of Timbre*, ed. Alexander Rehding and Emily Dolan. Link to audio examples (Google Drive).

Nicolas Donin, "Sonic Imprints: Instrumental Resynthesis in Contemporary Composition." In Gianmario Borio (ed.), *Musical Listening in the Age of Technological Reproducibility*. Farnham/Aldershot: Ashgate, 2014.

Additional reading/resources (optional)

Philippe Hurel, "La musique spectrale... à terme!" English version.

-------. "Le phénomène sonore, un modèle pour la composition." In *Le Timbre: métaphore pour la composition,* ed. Jean-Baptiste Barriere. Paris: C. Bourgois/IRCAM, 1991.

Philippe Hurel and Guy Lelong, "Leçon des choses : étapes." In Philippe Hurel, Cahiers de l'IRCAM 5, 71–86. Paris: IRCAM, 1994.

Neuropsychology of Music, ed. Manfred Clynes, 279–98. New York: Plenum, 1982.

11 Thursday, November 14

Assignments (submit on myCourses by midnight on Wednesday, November 13)

1. Analysis: Write a short analytical essay (as usual, 400–600 words) on the first movement of Grisey's *Quatre Chants,* focusing on timbral aspects of the work. Though you may refer to the discussions of pitch and rhythmic aspects of the movement in the articles below, it's not required: the essential goal of this assignment is to consider the timbral effects that emerge from Grisey's approach to orchestration.

• Grisey, Quatre Chants pour franchir le seuil (1998) score | recordings: Prélude: La mort de l'ange ("D'après Les heures à la nuit de Guez Ricord") | Interlude: La mort de la civilisation ("D'après Les sarcophages égyptiens du Moyen Empire") | Interlude: La mort de la voix ("D'après Erinna") | Faux interlude: La mort de l'humanité ("D'après Lés Lés popée de Gilgamesh") | Berceuse

2. Course wrap-up commentary: Write a list of bullet-point paragraphs (400–600 words total) summarizing your general observations about the course materials so far: this can include commentary on particular readings or musical works that you found especially engaging or provocative, your unanswered questions on timbre and orchestration, directions for future study, etc.

Readings

Jean-Luc Hervé, "Quatre Chants pour franchir le seuil." In Contemporary Compositional Techniques and OpenMusic, ed. Bob Gilmore and Rozalie Hirs (Paris: IRCAM/Delatour, 2009): 31–43.

Timothy Sullivan, "Gérard Grisey's *Quatre chants pour franchir le seuil:* Spectral Music on the Threshold." PhD diss., University of Michigan, 2008. Read only 66–83, optionally continuing with Chapters 3 and 4 (84–153).

Tristan Murail, "The Revolution of Complex Sounds." Contemporary Music Review 24/2–3 (2005): 121–35.

Additional reading/resources (optional)

Jérôme Baillet, Gérard Grisey: Fondements d'une écriture. Paris: L'Harmattan, 2000. Read 231-41 on Quatre Chants.

Daniel Pressnitzer and Stephen McAdams, "Acoustics, psychoacoustics and spectral music." Contemporary Music Review 19/2 (2000): 33–59.

Gérard Grisey, "Did you say spectral?" Contemporary Music Review 19/3 (2000): 1-3.

——. "La musique: le devinir des sons." In Écrits ou l'invention de la musique spectrale, edited by Guy Lelong and Anne-Marie Réby. Paris: Musica Falsa, 2008.

------. "Structuration des timbres dans la musique instrumentale." In Écrits ou l'invention de la musique spectrale, op cit. Joshua Fineberg, "Guide to the Basic Concepts and Techniques of Spectral Music" and "Musical Examples." Contemporary Music Review 19/2 (2000): 81–113 and 115–34.

12 Thursday, November 21: student presentations, 1/2

Presentations 1-6

- 1: Jemma
- 2: Lindsay
- 3: Jade
- 4: Jeremy
- 5: Henri
- 6: Jesse

Presentation guidelines

Presenters: 15 minutes to present (strict limit) plus 10 minutes for discussion (six presentations per class). Post a recording and score of the work(s) you're discussing on myCourses at least one full week before your presentation. If you're not presenting, your assignment for these two weeks is to complete the listening assigned by the presenters (with score if applicable).

13 Thursday, November 28: student presentations, 2/2

Presentations 7–12 7: Calum 8: Omer 9: Emily 10: Xavier 11: Chelsea 12: Marilou **Presentation guidelines** Presenters: 15 minutes to present (strict limit) plus 10 minutes for discussion (six presentations per class). Post a recording and score of the work(s) you're discussing on myCourses at least one full week before your presentation. If you're not presenting, your assignment for these two weeks is to complete the listening assigned by the presenters (with score if applicable).

Final paper due Friday, December 13

4,500-6,000 words (not including footnotes, bibliography, or examples). Any topic related to timbre in contemporary music, defined broadly—must include some detailed analysis and musical examples. Upload your paper in pdf (preferred) or doc/docx format (plus any supplemental files if necessary) to myCourses on the "Assignments" page. For your reference: Gordon Harvey, "Elements of the Academic Essay" and *Writing with Sources*.

Course policies

Grading

The final course grade will be based on class participation including attendance and participation (10%), a presentation as discussion leader (5%), writing assignments (25%), analyses (25%), an in-class presentation on an original research topic (10%), and a final paper (25%)—see paper guidelines above. Regular attendance and punctuality are essential for success in this course; unexcused absences will lower your final grade. Excused absences will be granted for documented illness, documented personal or family emergency, religious observances, and university-sanctioned activities such as ensemble tours; please email me as soon as possible (preferably before the date of the absence) if you will be missing class for one of these reasons.

Academic integrity statement

McGill University values academic integrity. Therefore all students must understand the meaning and consequences of cheating, plagiarism, and other academic offences under the Code of Student Conduct and Disciplinary Procedures (see http://www.mcgill.ca/students/srr/honest/ for more information).

Language for submission of written work

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

Conformément à la Charte des droits de l'étudiant de l'Université McGill, chaque étudiant a le droit de soumettre en français ou en anglais tous les travaux rédigés qui sont notés.

Policy on mobile devices in the classroom

Mobile computing or communications devices may be used in class only for note taking or consulting online resources.

Bibliography: selected additional readings on timbre (a work in progress!)

Kate Heidemann, "A System for Describing Vocal Timbre in Popular Song." Music Theory Online 22/1 (2016). www.mtosmt.org/issues/mto.16.22.1/mto.16.22.1.heidemann.html

- Steven Rings, "A Foreign Sound to Your Ear: Bob Dylan Performs 'It's Alright, Ma (I'm Only Bleeding),' 1964–2009." Music Theory Online 19/4 (2013). www.mtosmt.org/issues/mto.13.19.4/mto.13.19.4.rings.html
- Cornelia Fales, "Voiceness in Musical Instruments." In *The Oxford Handbook of Voice Studies*, edited by Nina Sun Eidsheim and Katherine Meizel. New York and Oxford: Oxford University Press, 2019.
- www.oxfordhandbooks.com/view/10.1093/oxfordhb/9780199982295.001.0001/oxfordhb-9780199982295-e-4 Theodore Levin and Valentina Süzükei. "Timbre-Centered Listening in the Soundscape of Tuva." In *The Oxford Handbook of Timbre,* edited by Emily I. Dolan and Alexander Rehding. New York: Oxford University Press, 2018. wwwoxfordhandbooks-com.proxy3.library.mcgill.ca/view/10.1093/oxfordhb/9780190637224.001.0001/oxfordhb-9780190637224-e-15
- Michael Tenzer, "Timbre and Polyphony in Balinese Gamelan." In *The Oxford Handbook of Timbre*, edited by Emily I Dolan and Alexander Rehding. New York and Oxford: Oxford University Press. https://www-oxfordhandbookscom.proxy3.library.mcgill.ca/view/10.1093/oxfordhb/9780190637224.001.0001/oxfordhb-9780190637224-e-19 David Batchelor, *Chromophobia*. London: Reaktion Books, 2000.

Lavengood, Megan. "A New Approach to the Analysis of Timbre." Ph.D. diss., City University of New York, 2017.

- Robert Fink, Melinda Latour, and Zachary Wallmark (eds.), *The Relentless Pursuit of Tone: Timbre in Popular Music*. New York and Oxford: Oxford University Press, 2018.
- Nina Eidsheim, The Race of Sound: Listening, Timbre, and Vocality in African American Music. Durham, NC: Duke University Press, 2018.
- Eric Drott, "Saariaho, Timbre, and Tonality." In *Tonality since 1950,* ed. Philip Rupprecht and Felix Wörner. Steiner Verlag, 2017.

