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ANALYTICAL PODCASTING[1]

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Topic: Podcast-based analysis of popular music.

Goal: Students will be able to craft a complete argument, succinctly describing the important elements of a popular song; illustrate them in real time with performed, recorded, or programmed examples; record their own narration clearly; and use audio editing software to produce a short, polished podcast.

Background: Students should have an understanding of diatonic harmony, melodic construction and/or counterpoint, and rhythm and meter. An understanding of the basic principles of text-setting is helpful, though it can also be included in the unit. I usually use this assignment near the end of Theory II, in connection with discussions of pop harmony; with adaptation, it could be used earlier, or even with non-majors.

The popular podcast *Song Exploder* (www.songexploder.net) describes itself as a place where "musicians take apart their songs, and, piece by piece tell the story of how they were made."[2] *Song Exploder's* hosts, Hrishikesh Hirway and Thao Nguyen, accomplish this through a combination of narration, interviews with the artists, and recorded examples of the songs being discussed – often including isolated studio tracks, outtakes, or live performances.

   With the exception of live interviews, this process is precisely what professional music theorists do in our analytical writing, and one of the primary skills we hope to instill in our students. Inspired by *Song Exploder*, I began giving my undergraduate theory students the assignment to analyze a song or other piece of music in "podcast" format. Analyzing with audio offers another way into music analysis, helping students to capture the dynamic movement and development of music without recourse to notation or diagrams. This medium is especially useful for discussing popular music, which we often analyze using only our own transcriptions, or without reference to a score at all.

   In this chapter, I will explore the pedagogical background of analytical podcasting as a form of multimodal rhetoric, describe the relevant lesson plans and outline the assignment prompt, and summarize some student responses to the project.

Pedagogical Background

I began using this project in my undergraduate music theory classes for several reasons. First, I wanted to open up new methods of musical engagement to my students, in addition to

traditional worksheets and quizzes, model compositions, and written analysis papers. Analytical podcasts allow students to study pieces of music in great detail, without making reference to a score; instead, they employ their own transcription and performance skills, or use excerpts from professional recordings, or seek musical insights using computer analysis programs like Sonic Visualiser. By asking them to focus on making a single argument about one song, the format also prepares students to make sustained arguments in prose – a feature of my more advanced music theory classes.

Second, I wanted to increase the proportion of popular music that my classes discussed, particularly in later semesters, when the tendency of theory classes is to find ever more complicated examples from the Western canon. As theory teachers everywhere seek to diversify their curricula, we must seek commensurate ways of expanding our definition of the field itself, and inventing other means of analysis that meet popular musics, world musics, and other genres and repertoires on their own terms. Although the analytical podcast project is particularly effective for popular music, it could be used with any genre. *Song Exploder* itself, for example, features film and television soundtracks (such as Ludwig Göransson's score for *Black Panther*, Alexandre Desplat's *The Imitation Game*, and Ramin Djawadi's *Game of Thrones* title theme) prominently alongside its many pop-oriented episodes.

Finally, I wanted to incorporate the use of multimedia production and editing into my courses. I believe that some competency with audio recording and editing is essential for twenty-first-century musicians. In the absence of a music technology program, the music theory sequence (traditionally focused on imparting to students the professional skills necessary to analyze and compose music) seems to be a natural place to teach the basics of audio production. Introducing students to media production is not only professionalization, however: it ties into broader currents in music studies (such as the burgeoning interdisciplinary field of sound studies). These developments are mirrored in the arts and humanities more generally, from the increasing role of multimodal composition in college writing programs, to the growth of media studies and specialized fields like critical media practice, to the surge of interest among many scholars in broader public engagement. In some ways, the music theory classroom has often been ahead of other humanities disciplines when it comes to multimodal rhetoric: model composition assignments, for instance, have always been a way of asking students to engage with academic knowledge in non-verbal ways. But over the past decade, multimodal composition has occupied an increasingly prominent position in the scholarly and pedagogical literature – including a great deal of attention paid to sonic phenomena like sound, music, and the voice.[3] The time is right, then, for music theory teachers to learn something about multimodal composition from our colleagues in other humanities disciplines.

The Project

The project prompt (available in the Supplemental Materials) asks students to produce a 6- to 8-minute analysis of a song, illustrated with musical examples. Students are allowed to use excerpts from a recording, sing or perform their examples, or produce synthesized excerpts in Finale/Sibelius, GarageBand, or similar software. Most of my students have chosen one of the first two options.

In the prompt, I tell students to develop a single, focused argument about a song, and I encourage them to study any and all aspects of the music that will support that argument. Sometimes this means harmony or form, or a detailed analysis of how a melody is put together. In many cases, however, students are happy to have an opportunity to discuss aspects like timbre, instrumentation, tempo, rhythm and meter, or production techniques. I outline the process of production,

encourage them to experiment freely and plan extensively before they begin to record, and set them loose. In the past, I have asked students to post their final projects on SoundCloud, encouraging them to develop the habit of posting their creative work on public fora; however, since that website's algorithms have recently become more sensitive to the posting of copyrighted recordings (even though this project is unassailably fair use), most of them now email their final podcasts to me.

Scaffolding

I approach analytical podcasting with the end product in mind, and I scaffold the project with two distinct types of class meetings. First, I teach a unit on harmony and form in popular music using traditional lectures and in-class activities, listening activities, and worksheets. Rather than employ a textbook (or try to fit rock and pop repertoire into the conceptual framework of an existing theory textbook), I use mostly my own materials, assembled from a collection of recent scholarship in the field.[4] By analyzing several songs in class (one or two provided by me, the rest chosen by the class), students learn about common chord progressions, form, harmonic function, and the rhythmic elements of popular music. This provides a context for their own analytical explorations.

Second, I conduct a workshop on audio-based analysis and a tutorial on relevant hardware and software. I teach my students to use Audacity, a free audio editor that is available for both Macintosh and Windows.[5] You can use other software, particularly if you are already comfortable with another editing suite, or if your institution provides students with access to high-level editing software.[6]

Audio Workshop Outline

Before class, I post an example track (I have used Stevie Wonder's "Golden Lady" ever since a student suggested it the first time I taught this lesson) on the course website, and ask my students to bring their laptops to class. Using this example track, I demonstrate some basic editing moves in front of the class: making cuts, excerpting portions of the song (in Audacity, a simple process of cutting and pasting), adjusting the volume level, recording a voice-over, mixing two tracks together, and using fade-in and fade-out to create smooth transitions.[7] It is also useful to demonstrate some of the interface features that Audacity and other sound editing suites offer such as the ability to "solo" a track in order to hear it in isolation, or to "sync-lock" two or more tracks so that they can be moved around the project as a group.

Finally, I demonstrate the process of recording and editing a short commentary on "Golden Lady." This shows students how they might construct an oral argument about a song, proceeding from a contextualizing introduction, to a musical example, to an analysis of the interesting features of that example, and so forth. It also demonstrates the process of recording audio and working with files.

I usually tell my students to use either their smartphones or their laptops for their podcasting projects. Dedicated, professional equipment isn't necessary for beginners; it is more important that students learn how to effectively use the tools already at their disposal. I also emphasize the need for students to seek a quiet space for recording (often pointing out or even recording the noises of my classroom's ventilation system or fluorescent lights). For students without access to technology, most college computer labs offer useful software and even loaner laptops. If your department controls its own computer lab, or a music library, you may wish to have Audacity or other relevant software installed on those computers.

After I have played my students the song, I record a rough introduction, simply by speaking into my smartphone, held about eight inches from my face. I might start off by saying something like:

> Stevie Wonder's "Golden Lady," from his 1973 album *Innervisions*, is structured by a pair of unusual chord progressions, which we hear first in the verse, and then in the chorus. In the first part of the verse, we hear a chain of four chords. We hear E-flat major, F minor, G minor, and A minor. This repeats a couple of times, so first, let's listen to that progression.[8]

After speaking, I stop and email (or AirDrop) the file to myself, and quickly post it on our course website so students can have access to it. I start a new Audacity project, import the file, and trim the dead air time before and after my narration. Next, I show them how to import an mp3 file of "Golden Lady," select the relevant portion of the music (which begins at about 0:20 in most recordings, just after the piano introduction), and fade it in under the narration with a few seconds of lead-in time. I then demonstrate how to lower the volume of the track after the chord progression has been heard several times, so that narration can continue and the musical example can fade out afterward.

At this point, I open up the process to students, asking both "how might we continue this analysis?" and "how *else* might this podcast have begun?" The latter is the more interesting question: while I began with harmony (which I am somewhat inclined to do as a college music theory professor), I like to ask students what interests them about the song. Students might want to talk about rhythm, wishing to deconstruct the track's sparse groove. They might be drawn to the track's timbral qualities (including the flute or the striking synthesizer that appears during the choruses). Jazz-inclined students might want to explore the extended chords that underpin the chorus. In my post-project surveys (discussed more below), some students noted that the open-ended nature of the assignment intimidated them into staying close to topics we had already discussed in class, but many others welcomed the chance to explore freely; some noted that they felt especially drawn to formal aspects rather than harmony.

Analyzing Audio

Working with an audio file on the computer is also an opportunity to demonstrate some of the available analytical techniques for working with sound. Computer-aided analysis is not necessary for this project, but making it available to students can help support the goals of the assignment by opening up alternate ways of seeing/hearing the music. Programs like Sonic Visualiser (available from charm.rhul.ac.uk) can be used to generate insights for analysis: students can visualize the piece's audible spectrum, track the beat, extract pitch content, or compare different recordings, performances, or remixes of the same song. As shown in Figure 57.1, students might use Sonic Visualizer's "Spectrogram" layer to explore the anatomy of the song without relying on notation, visually comparing the very sparse introduction (Figure 57.1a) with the verse (Figure 57.1b). This might aid them, for example, in discussing the song's arrangement, or the role of the hi-hat cymbal (see especially Figure 57.1b), or any number of other topics related to the track's production.[9] And while this assignment is generally geared toward music majors who are fluent in music notation, visual analyses might be used to push them out of their notation-centric comfort zone. Or, it could be used to help untrained or non-music students to visualize music in order to talk about it in greater detail.

If there is time in class, I will sometimes lead a session devoted to analyzing the practice of podcasting itself. In such situations, I will often select an episode of a favorite, non-musical podcast (such as *99% Invisible* or *The Memory Palace*), and facilitate a discussion of the many production elements that have come to characterize a contemporary "podcast aesthetic": background
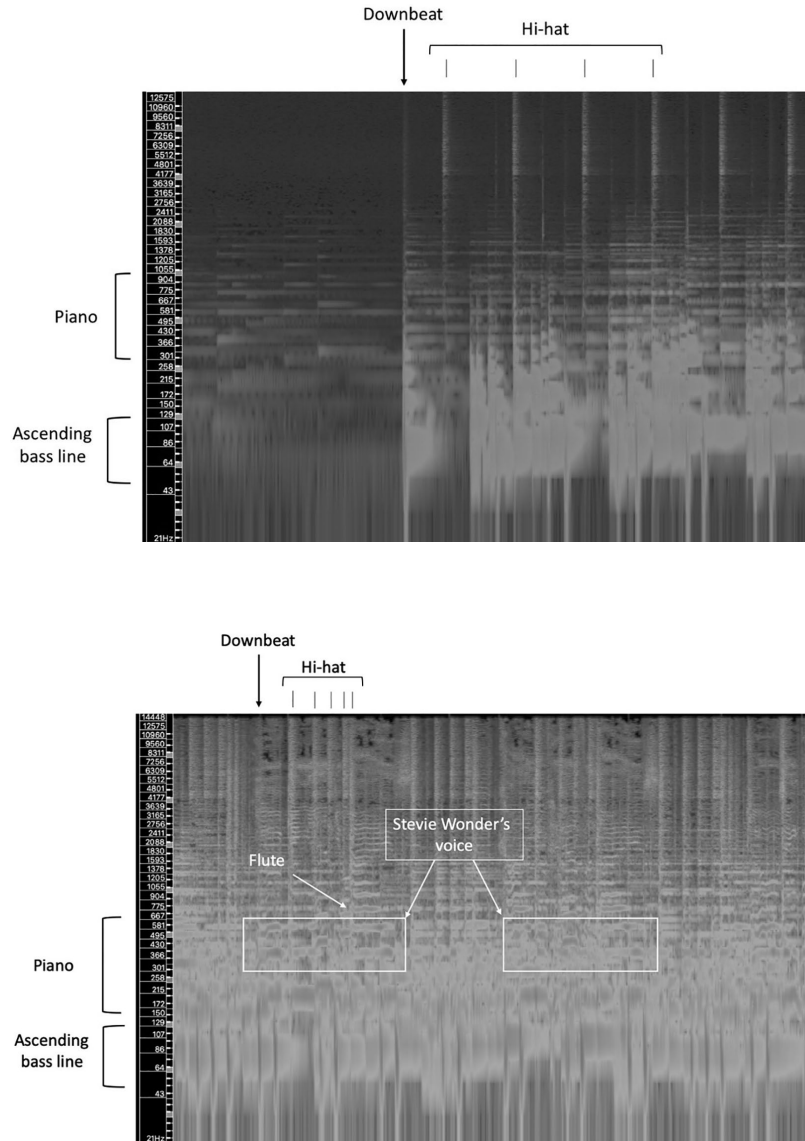
Figure 57.1   Spectrograms of (a) the introduction (0:20–0:23) of "Golden Lady" and (b) the verse (0:39–0:42).

music; a primary narrator supplemented by a polyphonic tapestry of additional voices; live field recordings or sound effects; and a casual tone (often breaking the "fourth wall" or incorporating elements that give behind-the-scenes insight) that develops a sense of intimacy.

Commentary

I have used this project four times in my classes so far. It works well near the end of the second semester of the music theory sequence, or perhaps at the beginning of the third. Combined with other scaffolding assignments, analytical podcasting can be a bridge to more substantial writing assignments in later semesters. The parameters of the assignment may be adapted somewhat, depending

upon when the project happens within the theory sequence (or even outside of it), or the particular skills or interests of your students. When I use the podcasting assignment, my students are already comfortable with triads in both Classical and pop contexts, and are familiar with concepts like secondary dominants and modulation; they have not, however, encountered advanced ideas like modal mixture, nor do they have very much experience dealing with musical form. Given the open-ended nature of the assignment, my students have generally chosen songs that they're ready to deal with. Difficulties may still arise, however. It is best to deal with problems on a case by case basis, by holding office hours for consultation, or by asking students to turn in preliminary materials like an outline or draft, or some form of transcription or graphic analysis. And while I have only used this project in classes of 12–15 students, it could easily scale to larger groups. In my experience, grading multimedia assignments is very quick, particularly if one gives comments in audiovisual form as well.[10]

While I tend to shy away from using detailed rubrics for analytical podcasts – because the prompt is so open ended, and production time so limited – I do look for certain elements, as noted in the assignment (included in the Supplemental Materials). At minimum, the technical aspects of the podcast should not distract from the content. Students ought to speak slowly and clearly, and record themselves in a room without excessive background noise; the audio levels should be loud and clear; and the mixing should ensure that any narration is audible above the music. A higher-level project will be smoothly edited, so that the narration and examples proceed at a natural pace: pauses and errors ought to be edited out, with space left for a natural "breath" between sentences or ideas. Musical examples should fade in and out smoothly. The very best projects will not only be technically competent, but should use the medium to make their argument by smoothly interweaving musical examples with narration, talking directly over the music when appropriate, and using introductory and/or closing music to create a complete, aesthetically satisfying listening experience.

In terms of academic content, the project's primary goal is to ensure that students can make a clear and complete argument about some aspect of the music. Therefore, the most important criterion is the presence of a clear thesis statement, a conclusion, and several well-framed supporting details in between. Because the project is so open-ended (and I encourage students to use it as an opportunity to address ideas we may not have discussed in class), I do not require specific reference to course materials, though citing theoretical concepts is almost always a sign of a strong analysis. And the best podcast projects, like the best written essays, offer creative arguments, strong evidence, and use sophisticated language to make their points clearly and persuasively.

In the spring of 2018, I surveyed my students at Gettysburg College on their reactions to the assignment. Students responded positively to most of the learning goals that I have articulated. One noted that they learned that "I don't need notes on a page to look at a piece," while another noted that they found it satisfying to "actually pull apart real-world examples of the concepts we learned about." Some students enjoyed the "semi-anonymity" of turning in an audio recording, while others noted that they would have been just as happy presenting in front of the class; most students agreed, however, that a podcast was the right amount of work, and that asking them to produce video-based analyses might have been too much, particularly at the end of the semester. Finally, when asked what additional activities might have been useful when preparing for or carrying out the project, some students suggested bringing a collaborative element to the assignment by allowing time to share analytical ideas and examples in class – a layer of revision that will surely lead to even more polished results.

Notes

2 "About," http://songexploder.net/about.
3 On multimodal composition, see Palmeri (2012). On sound recording and production as forms of mul-
    timodal composition, see Selfe (2009), Ahern (2013), and Ceraso (2018).
4 Some sources I have found especially useful include Doll (2017), Tagg (2014), Nobile (2016), and Shaffer,
    Hughes, and Moseley (2014).
5 Audacity and its associated plugins can be downloaded at www.audacityteam.org. My guide to install-
    ing and configuring Audacity is included in the online supplement to this chapter.
6 High-end software like ProTools or Logic isn't necessary for a project like this, but building the con-
    nections and competencies might be useful if, for example, your institution has a music technology or
    music production program already in place.
7 My guide to audio editing with Audacity is included in the online supplement to this chapter. Lynda.
    com (requires an individual or institutional subscription) also offers two excellent introductory modules,
    and YouTube hosts dozens of tutorials on basic and advanced topics in Audacity.
8 This narration is based on a file I recorded during an actual class session in March 2017.
9 On the use of spectrographic analysis in music theory, see Lehman (2017) and Lucas (2018).
10 For more on assessing multimedia projects, see O'Hara (2015).

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