**MITH Talk: Listening Bodies, Digital Production, and the Pursuit of Invigorated Sonic Experiences**

**Steph Ceraso | Oct 7 2014**

**[SLIDE: Jimi Hendrix concert video; features Hendrix playing an electric guitar solo of the song “Hey Joe” with his teeth.]**

If asked to identify the body part that is related to listening, most people would point to their ears without a second thought. Despite the deeply entrenched association between our ears and the act of listening, however, sound is not experienced exclusively through a single sense; other parts of the body can be engaged during sonic interactions. As we just saw, Jimi Hendrix had a penchant for feeling the sounds of his guitar with his teeth. He’s in good company. Beethoven was known to put a stick in his mouth to feel the sounds of the piano, and Thomas Edison liked to chomp on the wood of a gramophone to enhance his listening practices (Connor 168-169). And, as I’m sure you’ve all experienced, it’s also possible to feel sound in your stomach, throat, legs and other areas of the body—a common occurrence at clubs where music is amplified, or when a Mack truck passes you on the beltway. Identifying the ear as the body part that enables listening does not capture all that is involved in experiencing a sonic event. *Listening is a multisensory act.*

Yet, listening is rarely approached as a practice that involves more than our ears. **[SLIDE: features an image of a young girl wearing the “listening ears” she made at school; and a sign for listening illustrated with pictures of ears]** If and when we are taught to listen, we learn to concentrate and make meaning of audible words or sounds. Even the technologies that we interact with—Smartphones, iPods, tablets—reinforce *ear-centric* listening habits. **[SLIDE: features a young woman (with an earbud plugged into her ear) looking at the screen of her smartphone; and an ear-budded man who is engrossed by whatever is happening on his smartphone]** We plug earbuds into digital devices and crank up the volume to immerse ourselves in our own private sonic bubbles. By encouraging people to ignore the larger sonic environment around them, such technologies play a role in training listeners to develop selective, ear-centric listening habits. While I don’t believe that digital technologies are inherently “good” or “bad” for our listening practices, they do have an effect on the ways that we’re conditioned to listen.

In my primary area of research, rhetoric and composition, composing with sound is a standard part of multimodal composition curricula. The most common assignments associated with sound and listening in multimodal composing courses are podcasts, audio essays, and voiceovers. **[SLIDE: features a female student (with her back to us) staring at a screen that displays an audio editor interface; the jagged green sound waves are visible on the screen]** In these projects, sound takes the form of linear, audible content that closely resembles textual writing. Indeed, in multimodal composition courses, different modes like sound (or images or video) are nearly always approached as extensions of text—as modes that emulate text in their structure, form, and meaning. **[SLIDE: features an image of an example podcast script that was created using a word processing program]** I would argue that teaching students to deal with sound as a kind of text not only replicates the same ear-centric, meaning-centric listening practices that many of us use in relation to spoken language, but it diminishes the full range of sound’s compositional and rhetorical possibilities. *Sound is a distinct mode with distinct affordances, and we should be teaching students to take advantage of that.*

In response to widespread “plug in and tune out” listening habits, and to the need for a more substantial listening education—particularly in relation to digital engagement and production—my book project re-imagines the ways that we teach listening to account for the multiple sensory modes through which sound is experienced; I want to expand how we think about and practice listening as a situated, full-bodied act. The listening pedagogy I introduce is based on my concept of *multimodal listening*, **[SLIDE: features abbreviated versions of the ideas mentioned in the rest of this paragraph (for emphasis)]** a practice that involves attending to the sensory, material, and contextual aspects of a sonic event. Unlike ear-centric listening practices in which listeners’ main goal is to hear and interpret audible sound, multimodal listening moves beyond the exclusively audible by emphasizing the *ecological relationship* between sound, bodies, and environments. Multimodal listening practices entail developing an awareness of how sound shapes and is shaped by different contexts, material objects, and embodied, multisensory experiences. In short, rather than homing in on specific content, multimodal listening requires listeners to approach sonic interactions *holistically*.

I argue that cultivating multimodal listening practices enables students to become more savvy consumers *and* producers of sound in relation to composing digital media and in their everyday lives. Developing a heightened sensitivity to how sound *works and affects* is especially necessary at this moment in time because sound is playing an increasingly important role in the texts, products, and environments that we interact with and create; sound is being used strategically to influence our moods, behaviors, and experiences, and tapping into these strategies via multimodal listening can help students create more effective and dynamic multimodal work.

The framework for my listening pedagogy is based on listening and composing techniques from a diverse mix of sound professionals, including deaf percussionist Evelyn Glennie; acoustic designers, who design sound for buildings or spaces; and product designers, specifically automotive acoustic engineers, who design sound for cars. By adopting a wide range of professional practices, I propose an expansive, explicitly embodied approach to the teaching of listening in rhetoric and composition—an approach that I believe could enrich practices in a number of fields dealing with multimodality, media composition, and sound more broadly (like digital humanities, media studies, and sound studies, to name a few).

 To give you a better sense of my project, today I want to amplify some of the *key features* of multimodal listening pedagogy. I’ll provide some examples of how multimodal listening works in extra-academic spaces, as well as how it might be translated to the classroom. I’ll focus on multimodal listening practices in relation to *the body* in part 1 of my talk, *the environment* in part 2, and *material objects* in part 3. To conclude, I’ll elaborate on the significance of my project for both rhet/comp and other disciplines that deal with sound. Though this book project is expressly pedagogical in that it offers a set of embodied practices for critically engaging and composing with sound, multimodal listening can help anyone become a more sensitive and thoughtful listener in their interactions with the world. My hope is that multimodal listening pedagogy will provide a generative foundation for further discussions about the teaching and practice of listening writ large.

**[SLIDE: The text reads: “Part 1: ‘Come on Feel (And See and Touch) the Noise’**

***Key Feature #1: Multimodal listeners gain experiential knowledge that can help them make strategic decisions about how to design sonic projects for embodied audiences.”*]**

**[SLIDE: features an image of musician Dame Evelyn Glennie standing in front of a red brick wall; her drum sticks are tucked into her belt and are used here as a kind of accessory to her body (like the rest of her clothes)]**

Dame Evelyn Glennie is a renowned musician who performs more than 100 concerts a year worldwide. Most notably, she was a featured performer at the Opening Ceremony of the 2012 London Olympics (Glennie “Official Website”). Glennie’s experiences provide a valuable model for understanding listening as a multimodal event because they augment the *synesthetic* nature of sonic experience that most people, particularly people with fully functioning auditory systems, tend to ignore.

For Glennie, *ear-centric listening* is not an option. In fact, she has received as much media attention for her deafness as she has for her music.

**[SLIDE: features a few of the hundreds of article titles that underscore Glennie’s deafness, including: “Incredible Deaf Musician,” “Dame Evelyn Glennie, The Deaf Percussionist Who Listens With Her Whole Body,” “Deaf Percussionist Dame Evelyn Glennie Bangs the Drum in 3D Film About Science of Sound,” “Deaf Percussionist Dame Evelyn Glennie Cuts the Noise,” and “Life of a Deaf Percussionist.”]**

The consistent highlighting of Glennie’s deafness has depicted her as somewhat of an anomaly—as if the full-bodied listening practices she’s developed apply only to her because she cannot hear. Rather than treating Glennie as a specialized case, I argue that her multimodal listening practices are learned bodily habits that can be reproduced in any individual regardless of where they fall on the hearing continuum; that Glennie’s multimodal listening practices exemplify a capacious, inclusive form of listening that has the potential to change how people think about and interact with sound. To develop the core framework for my multimodal listening pedagogy, I draw from Glennie’s listening practices, which she has described in autobiographical texts, films, and in a personal interview I conducted with her in 2011. I’ll discuss just a few examples to illustrate her expansive listening techniques.

As Glennie demonstrates, listening is a practice that is grounded in the body—in physical experience. In Thomas Riedelsheimer’s 2005 documentary *Touch the Sound*, there is a poignant moment when Glennie describes sound in visceral terms. Let’s take a look at that scene…

**[SLIDE: features a clip of Glennie playing the gong in the film *Touch the Sound*; the gong sound gets increasingly louder and continues to sound after she stops hitting it; in a voiceover, Glennie is heard saying: “You feel it through your body, and sometimes it almost hits your face.”]**

Notice that after she reaches a crescendo, she stops making contact with the instrument but continues to stand directly in front of it. By lingering there, she indicates to the viewer that she can still feel the power—the material force—of the sonic vibrations after she has finished playing. The tactile, bodily interaction with sound that is apparent in this scene is something that Glennie has emphasized repeatedly in interviews and public talks, and *touching sound* seems to be a crucial aspect of her multimodal listening practices.

Due to her deafness, Glennie was taught to attend to how various kinds of sonic vibrations affected her body in different ways. In her autobiography, *Good Vibrations*, she describes “getting in touch with music” by sitting “with a clattery old portable tape recorder on my lap, one that vibrated as much as possible so I could experience the waves of sound through my body” (159). In this musical context, Glennie is not reflecting upon the meaning of sound. Rather, she is thinking about how the force of sound is working—how it is transforming her body in various ways. Glennie’s listening experiences illustrate that the initial encounter between sound and body is in part what makes multimodal listening a possibility. Simply put, her bodily listening practices provide her with experiential knowledge about how sound works as an affective mode of communication.

Additionally, Glennie emphasizes the role of the visual in her own and others’ listening experiences. For instance, she often experiments with the relationship between sound and visible movement in her performances. This clip from her Ted Talk provides a good example of her playful audio-visual experimentation:

**[SLIDE: features Glennie doing a demonstration on the xylophone in front of a live audience. She asks, “Can you hear anything?” (no one responds) Then she explains, “Exactly. Because I’m not even touching it. (audience laughs) She continues: “But yet, we get the sensation that there’s something happening, in the same way that when I see a tree move, I imagine that tree making a rustling sound. Do you see what I mean? So whatever the eye sees, there’s always sound happening.”]**

By calling attention to the movements of her mallets, Glennie tricks her audience into believing that those movements resulted in audible sound. Playing with the audience’s perception of sound allows Glennie to give them a glimpse into her own visual listening practices. This scene emphasizes the strong connection between sound and vision that most people unconsciously rely on when listening.

Again, these are just a few of ways that Glennie practices multimodal listening, or attending to how sight, sound, and touch converge during sonic encounters. So, how can adopting Glennie’s heightened sensory awareness help our students become more savvy listeners and composers of sound in digital environments? First, I’d suggest that multimodal listening practices attune composers to the affective aspects of sound. It’s a standard practice for composers of digital media to think about how audiences will intellectually and emotionally react to their compositions, but adopting the multimodal listening practices that Glennie demonstrates would also require composers to consider how their work will affect *embodied* audiences. By “embodied,” I’m not referring to the representational categories (race, gender, class, disability, sexual orientation) that have become staples of discussions of embodiment in the humanities and social sciences, but to the fact that an embodied audience is comprised of *sensing, nerve-filled, responsive bodies****.* [SLIDE: features a picture of an audience at a live concert waving their hands in the air as a way of interacting with the musician on stage; and a medical illustration of the tree-like human nervous system.]**

In short, multimodal listening encourages composers to develop a critical awareness of how sound works as an affective mode, and thus how their own compositions might affect audiences on a sensory level. In this way, it challenges creators of digital media to think about ways to heighten sonic experiences in digital spaces. How might digital projects explore and possibly recreate the tactile and visual experience of sound? What would projects look, sound, and *feel* like if more attention was paid to sound as a multimodal event? Because multimodal listening is focused on sensory interaction, it’s a practice that can guide us in designing and developing more holistic, full-bodied digital experiences with sound.

Second, multimodal listening practices can help students account for how different kinds of bodies might interact with and have access to sound. Rather than assuming that all bodies are uniform—that all listeners listen in the exact same way—composers of digital work need to acknowledge and plan for an audience that consists of a diverse range of listeners with various sensory capacities and learning needs. Multimodal listening raises students’ awareness of their own and others’ sensory experiences, and can thus *expand the ways that sensing bodies are figured into the composing process*. That is, multimodal listening challenges students to design sonic compositions that can be experienced via multiple modes and pathways—visually, textually, tactilely—instead of only through the ears. To my mind, multimodal listening practices serve as a way to encourage composers to experiment with *universal design*—to come up with creative strategies for developing sonic compositions that offer flexible experiences (Dolmage and Lewiecki-Wilson). To sum up, by focusing on the body and senses, multimodal listening practices can lead to the production of more affectively powerful and inclusive sonic media.

**[SLIDE: The texts reads: “Part 2: Sound & Environments**

***Key Feature #2: Multimodal listeners develop a critical understanding of how sound works and affects in particular contexts.”*]**

In contrast to the immersive experience of sound in three-dimensional spaces, it’s easy to forget that sound experienced in digital spaces is located in an environment at all. **[SLIDE: features an ear-budded female student (only the back of her head is visible) who is focused on the screen of the digital audio editor she is working with]** Listeners typically engage with digital projects while looking at a flat, two-dimensional screen and listening through miniscule speakers or tiny earbuds that diminish the affects of sound. While this etiolated sonic experience is fine for some projects, I would argue that if sonic composing and listening practices are limited to the screen of a digital device (or any one context), then students are not experiencing a full enough range of sonic environments to get a sense of how different contexts shape sonic experiences. As I was developing multimodal listening pedagogy, then, I wanted to find examples of listening practices that could help students cultivate a sharper sense of how sound works in particular environments. So, I turned to the field of acoustic design.

Acoustic designers are sound professionals who are hired to create or manipulate sound for different venues—from restaurants to concert halls to public parks. I had a chance to interview several acoustic designers about their own expansive listening and composing practices, and the idea that they stressed repeatedly was this: it is essential to treat sound as an element that is connected to and influenced by a larger aesthetic and spatial network.” **[SLIDE: features an image of the ornately designed arches and high ceilings of the Cathedral of Learning at the University of Pittsburgh; includes my text: “*it is essential to* *treat sound as an element that is connected to and influenced by a larger aesthetic and spatial network*.”]**

For example, some music venues require a material structure that allows for sonic qualities like musical clarity, warmth, reverberance, and intimacy. To arrive at such qualities, acoustic designers must attend to how various materials and aesthetic features in the venue affect the ways that sound is experienced by a listening audience. Due to their sound absorbing qualities (or lack thereof), the kinds of materials used to construct an environment have a major influence on what that environment sounds like. Adding wood paneling to a venue would create a very different sound (and look) than concrete walls; incorporating carpet into the design would affect the soundscape much differently than a marble floor. Even the shape of the ceiling and walls affects the way that sound bounces off of those features, which changes how the sound is experienced in the space.

To give you a better sense of this, let’s listen to a short audio clip of the band Bloc Party playing at the 9:30 Club in DC.

**[SLIDE: features an image of a rowdy crowd inside of the 9:30 Club during a rock concert; the accompanying audio features a concert recording of the band Bloc Party playing in this space; over aggressive electric guitar sounds that alternate between high and low pitches, the lead singer is shouting the lyrics “war, war, war, war, I want to declare a war…”; the lyrics that follow are hard to understand and the sound is generally distorted.]**

In contrast, here’s a clip of Dave Grohl singing at a Paul McCartney tribute concert at the Kennedy Center.

**[SLIDE: features an image of the crowd during a concert at the Kennedy Center; all of the seats are filled by an attentive, well-dressed audience; the accompanying audio features musician Dave Grohl signing Paul McCartney’s song, “Maybe I’m Amazed”; Grohl is backed by a strong piano melody and a light snare drum keeping time; in a clear, loud voice we hear the lyrics, “Maybe I’m amazed at the way you love me all the time. (audience applause) Maybe I’m afraid of the way I love you. (brief pause with piano transition) Maybe I’m amazed at the way you pull me out of time…” (clip fades out)]**

Did you notice that the acoustics of the 9:30 club were more suited to small, rowdy crowds and audience interaction? The sound quality was kind of scratchy and dirty (due to the concrete surfaces and the enclosed space of the venue), but that sound is appropriate for the small, party-style concerts that often take place at the 9:30 club. In contrast, the massive space and high ceilings of the Kennedy Center allowed the clean notes of Dave Grohl’s voice to fill the space in a more resonant way. Even the audience’s applause sounded bigger and crisper in that space. The elegant design (chandeliers, plush seating, ornate walls) also alerts the audience to act in a more “civilized,” “polite” way compared to the feisty crowd at the 9:30 Club. It’s clear that the aesthetic and spatial features of a room are inextricably linked to the sound of that room, and to listeners’ behavior. Rather than focusing on sound in isolation, then, it is crucial for acoustic designers to listen multimodally: they listen for how people’s embodied experience of sound changes in relation to the material and spatial composition of an environment, and then they make adjustments to that physical environment until they achieve the desired listening experience for the space.

While digital spaces are significantly different from the three-dimensional spaces acoustic designers work with, being more cognizant of sound as an element that is connected to and shaped by other features of an environment can help students produce more cohesive, immersive digital projects. For example, taking advantage of the spatial and aesthetic affordances of digital projects involves asking questions like: How do I want listeners to move through and experience my project? How might I make the various digital spaces of my project more sonically distinct from one another? How do the aesthetic features (colors, textures, visual layout, movement) influence the ways that listeners might experience sound in this digital space? If users cannot access sound, how can I help them to experience this sonic environment in other ways? In sum, approaching digital work like an acoustic designer requires thinking about digital sound projects as *holistic environments* for users.

In order to get students to adopt this holistic approach to sound, though, it’s first necessary to *defamiliarize* the digital composing experiences that they’re used to (like only working with audio editors on computers). That’s why multimodal listening pedagogy encourages students to attend to how sound is working in a wide range of environments. I argue that training listeners to become acutely attuned to how sound works in particular contexts will heighten their sensitivity to the functions, affects, constraints, and possibilities of sound in a variety of different listening situations. In turn, this heightened sensitivity can result in more informed and thoughtful decisions about how to compose with sound in digital contexts.

One way that I try to expand students’ engagement with sonic environments in my own classroom is by having them compose soundscapes. **[SLIDE: features an image of a yellow bridge with the Pittsburgh skyline in the background]** For instance, in the “Sounding Pittsburgh” Project, I asked students to work in teams to compose a digital soundscape of the Pittsburgh neighborhood of their choice. Teams conducted field research in their neighborhoods by listening, taking notes and photos, and capturing sounds with digital audio recorders. Then they assessed their collection of sonic material and chose the sounds that they felt best represented their neighborhood. Once we synthesized everyone’s material to compose a collaborative soundscape of Pittsburgh, we talked about what information or meaning could be gleaned from the sounds—what storiesthe sounds told about Pittsburgh or particular neighborhoods. For example, here is an audio sample from my students’ soundscape of East Liberty. **[AUDIO: a chaotic sound collage of traffic noise, cars whooshing by, horns honking, ambulance sirens, jack hammers]** These students noted that the construction sounds in East Liberty occurred more frequently than in any other part of the city we recorded. They ended up making an argument (supported by photo documentation) about how the sound recordings made it possible to trace the process of gentrification going on in different areas of that neighborhood.

Students also compared their embodied listening experiences in the city to their experiences with our digital sonic representation of the city. They explained that their immersive and ephemeral encounters with sound in Pittsburgh neighborhoods were more intense, affective, and dynamic compared to experiencing those sounds through tiny computer speakers. At the same time, the digital soundscape offered a more controlled listening experience; the ability to listen repeatedly in this setting made it easier for them to analyze and find patterns among the sounds. Having students return to a digital environment *after* their sonic encounters in Pittsburgh seemed to bring the constraints and possibilities of sound in each setting into sharp relief. As I learned from this pedagogical experiment, teaching students about the richness and complexity of sonic experience requires moving beyond exclusively digital contexts to include a variety of listening situations. Ultimately, I think that the exposure and critical attention to different sonic interactions makes students more sensitive to the ways that they can use sound (or not) in digital compositions.

Before moving on to the next section I’d just like to mention a great local resource for teaching listening in relation to environments. There is a free “location-aware” sound app called “The National Mall” that provides a site-specific listening experience.

**[SLIDE: features the promotional video for the app, which includes a young woman exploring the National Mall; the soundtrack from the app (introspective electronic music that sometimes soars and swells to infuse the landscape with emotion) plays throughout the video].**

The app was created by geo-tagging segments of music that were composed for specific zones within The Mall. As smartphone-equipped users traverse the monument-filled park, the music changes according to their location and the direction of their movement. I’ve used it several times and it truly transformed the space of the park for me. While I previously associated The Mall with tourists and boring fieldtrips, the music crafted for the space was exhilarating and it made me see and feel the monuments in a new way. Having students first walk around without earbuds, and then having them use the app would be a fantastic embodied example of how much sound can shape one’s experience of a place. Such an exercise could also serve as a model for the kinds of sound apps that students might be asked to create for places on campus or in the College Park community. It’s a great free resource and I’d recommend checking it out if you’re interested in doing more with listening and environments in your courses.

**[SLIDE: The text reads:**

**“Part 3: Sound & Material Objects**

***Key Practice #3: Multimodal listeners cultivate an understanding of how sound works as part of an integrated multisensory experience in relation to material objects.”*]**

Sound has become a fundamental part of the design and experience of material products—from food to floor cleaning robots **[SLIDE: features images of the noisy candy Pop Rocks, a Rice Krispies box that includes the slogan “Snap, Crackle, Pop!” and a video of a robot vacuum cleaner that plays an upbeat electronic melody].** I think it’s vital for a contemporary listening education to include practices that help students reflect on, experiment with, and compose material objects that integrate sound strategically because our lives are full of such objects. As I argue throughout my book project, students need to be taught to engage critically with everyday sonic experiences in order to gain a more expansive sense of how sound works and affects in different contexts. So, I decided to include a chapter on listening to and composing with physical things.

To better understand listening and sonic composing practices in relation to material objects, I chose to examine automotive acoustic engineers because of their expertise in using sound to shape and enhance drivers’ overall experiences. Though the visual aspects of cars tend to get the most attention in ads, the sounds of cars are crucial in automotive design. In fact, BMW employs over 150 acoustical engineers, and Ford has a growing acoustical department of 200 employees. **[SLIDE: features a screen shot from the website for *Wired*; the headline on the webpage reads “Did You Know BMW’s Door Click Had a Composer? It’s Emar Vegt, an Aural Designer”; included is an image of Vegt with headphones on; he appears to be playing with sound controls; a model car sits in front of him and large speakers are located behind him]** Considerable time and money are invested in making sure that everything from turn signals to windshield wipers has the *right* sound (Bijsterveld). Further, acoustic engineers design the sounds of cars to reflect distinct sonic styles that represent the overall identity of the company. The practice of styling car sounds is often referred to as “sonic branding” (the sonic equivalent to a visual logo). Sonic style plays a critical role in what I call the *rhetoricity of car sounds*, or the ways that car sounds attract and persuade particular consumers. Because car manufacturers know that sounds have the potential to entice (or repel) buyers, they put an extraordinary amount of effort into developing sounds for their brand.

It’s important to note, though, that sonic branding practices require more than just designing the sounds themselves. **[SLIDE: features an image of a red jaguar on a race track; audio: the sound of a jaguar engine that loudly revs up several times]** For example, consider the sound of this Ja*guar* engine. It’s aggressive and heavy on the growl…the sound, like the animal the car is named after, is associated with speed and strength, and so is the visual design: its curves and lines make it look powerful yet aerodynamic. The sound is also in sync with the masculine look and feel of the interior of the car. All of these coordinated elements are meant to echo Jaguar’s advertisement taglines, such as: “There is one machine, so instinctive, so seductive, *it’s as alive* as we are. It doesn’t click or buzz, it roars. Jaguar.” While it’s carefully integrated with other features of the car, sound is an essential part of “the Jaguar experience” as a whole—an experience that is intended to appeal to wealthy men who perhaps feel the need to explicitly perform their masculinity.

 This holistic approach to design is not limited to luxury cars. Sound has become an essential ingredient in the design, advertisement, and experience of products writ large. Many designers are using the sonic features of products to create very specific kinds of sensory-rich interactions. General Electric, for instance, is in the process of revamping the sounds for all of its products. The sounds and correlating visual and tactile designs of these products are integrated seamlessly to create customized sensory experiences. This clip provides a sample of the sounds created for one of their new lines of sophisticated kitchen appliances.

**[SLIDE: features video of one of GE’s Industrial Design Managers, who explains, “The GE Café Brand is a restaurant-inspired, professional product. We tried to draw attributes of that brand such as robustness, precision, and power into a longform piece that plays through and you can hear certain pops and clicks and analogue notes that we’re going to draw out and turn into actual sounds for the interface and control of the appliance.” As he is talking, the music from the longform piece is playing. Then the video displays the name of each control and plays its accompanying sound. Each sound is a brief (1-2 seconds) segment from the longform piece.]**

Though these sounds may seem trivial, they really do matter in terms of a product’s success. One of my favorite examples of failed experiential sound design is known as the “SunChips Debacle.” In an attempt to make its SunChips brand more environmentally friendly, in 2010 Frito-Lay introduced a compostable chip bag. It sounded like this **[SLIDE: features a video of a man reaching in a SunChips bag for a chip; when he touches the bag it makes a surprisingly loud crinkling sound. He gives the audience an amused, disapproving look]**. Consumers found it to be ridiculously noisy and complained. The bag had so many haters, in fact, that a facebook group called “SORRY I CAN’T HEAR YOU OVER THIS SUN CHIPS BAG” attracted nearly 30,000 fans. Sales fell, and the financial loss caused Frito-Lay to go back to the un-environmentally friendly bags. A spokesperson from the company acknowledged: “The packaging of the product is a multisensory experience for our consumers” (Byron). Like many chip companies, Frito-Lay is conscious of how the shape, texture, and crunch of chips contributes to consumers’ pleasurable experience with the product. However, overlooking the sound and feel of the bag turned out to be a disastrous mistake that resulted in a huge financial loss.

Considering the significant role of sound in everyday products, it seems to me that listening education needs to address how sound shapes our experience of material things. Using multimodal listening practices to attend to how the sounds of physical objects are connected to users’ multisensory experiences can help listeners better understand how an overall experience is being designed and packaged. More importantly, though, because multimodal listening requires attending to how the senses work together, students can use these practices to make informed decisions about how to create *holistic* sensory experiences in their own projects, whether they are digital or not.

One of the assignments I developed to get students thinking about how to design multisensory experiences is called the “Sonic Object Project.” I define “Sonic Objects” as any thing that uses sound to enhance users’ overall experience. My decision to use the word “object” instead of “product” was deliberate, as the aim of this exercise is not to try to turn students into entrepreneurs; instead, the word “object” leaves the assignment open to interpretation, so students could (ideally) choose to create more artistic and experimental objects, not necessarily ones “for sale.” This project requires students to design their own sonic objects via sketching (or building) a model and talking through how it would work, as well as creating the distinct sounds for their object in a digital audio editor. At the 2014 Conference on College Composition and Communication, I had a chance to test run a version of this assignment during a Sonic Pedagogy Workshop (due to time constraints, the workshop only dealt with the design phase of the project). One of the many interesting sonic objects designed in the workshop was a “Toy Fruit Basket.” **[SLIDE: features an image of the rough, colored pencil sketch for the design of the toy fruit basket]** Participants Christopher Potts and Lisa Phillips invented a baby toy they described as “a fruit basket that comes alive.” They explained that each piece of toy fruit in the basket would respond sonically to touch. Each unique kind of touch—rubbing, scratching, biting, squishing—would trigger a unique corresponding sound. Their design plan indicated that the pieces of fruit would be white to start, and then as the baby interacts with them they would change by becoming colorful, making sounds, and even releasing the smells of the fruit. Compared to simplistic children’s toys (the kind where you press a button and hear the same sound every time), the toy that they imagined integrates sound with the visual, tactile, and olfactory elements of the design in complex ways. In short, the fruit basket uses sound as a central part of the immersive, sensory experience of the toy.

What I found most interesting while listening to workshop participants talk about and develop their sonic object designs was how different their approach to this assignment was compared to planning a podcast or a soundtrack for a video. Rather than asking themselves about the structure and meaning of their sonic compositions, participants wrestled with another set of questions: How does the use of sound make me feel and behave? How does the sound contribute to my embodied experience with the object? What are the various possibilities and limitations of sound in this situation? How does the sound work with other material and sensory elements of the object’s design?

This kind of design exercise is effective, I think, because it connects digital composing to embodied interactions with tangible things; and it gives students the opportunity to explore and think about how sound works with other sensory modes to shape embodied experiences. While the “Sonic Object Project” still involves learning to compose sound with digital audio tools, it presents students with a richer, more dynamic sense of both “listening” and “multimodal composition.”

**[SLIDE: The text reads: “Conclusion: Toward More Expansive Listening and Composing Practices”]**

As sonic experiences change and evolve, we need to adapt to find new ways to become more sensitive and capable listeners and sonic composers. Listening must be treated as a practice that, like reading and writing and speaking, transforms over time in response to social, cultural, and technological developments. While listening has always involved multiple senses, now more than ever we need to pay attention to sound as a salient part of everyday experience. We need listening practices that can *reinvigorate our* *diminished sensory relationship* to sound in digital contexts. We need listening practices that can deepen our understanding of how designed sound is employed strategically to influence our moods and behaviors, and the ways that we interact with and navigate spaces. We need listening practices that can help us learn to use sound to produce the kinds of multimodal experiences that are being marketed and sold to us for consumption. We need listening practices that can facilitate a more engaged and reflective participation in the affectively-rich sonic world around us. Multimodal listening pedagogy responds to these needs. The examples I’ve focused on today provide only a glimpse of how multimodal listening might be used in rhet/comp and other fields, and I’d be happy to talk more about my larger project during Q&A. But I want to conclude by briefly discussing why teachers who teach digital production—whether its in composition, DH, or other kinds of media-based courses—should consider experimenting with multimodal listening pedagogy.

Producing sensorially-engaging texts requires listening practices that go beyond hearing and attributing meaning to sound. We can’t always treat sound as *just another kind of text*. [**SLIDE: features abbreviated versions of the following points (for emphasis)]** Multimodal listening pedagogy provides a more robust approach to listening in relation to multimodal experience and production. It is an important practice because it requires students to *listen like makers*; it challenges them to heighten their awareness of not only what sound means, but how it works and affects to shape experiences—knowledge that can lead to the creation of more thoughtful and lively digital projects and tools. Most significantly, multimodal listening encourages students to design digital work that accounts for diverse listeners with various bodily capacities and needs, thus making digital sound projects more inclusive and accessible to a broader population of users.

My hope is that multimodal listening pedagogy will lead to fresh, experimental approaches to the teaching of listening and sonic composing. As I’ve tried to illustrate, it’s more productive to think of listening in terms of sensory possibilities than as an “ears-only” practice. The fact that bodies can learn to experience listening via multiple modes presents teachers with an exciting opportunity to explore how a wider range of listening practices and sonic experiences might inform their pedagogies. In a culture where being plugged in to digital devices is the norm, when so much of what we pay attention to is streaming through earbuds or flashing on screens, I’m calling for a *re-education of our senses*—a bodily retraining that can help us learn to become open to the connections among sensory modes, materials, and environments. In addition to *listening in* to digital content, it’s time that we learn to *listen up*, *out*, *through*, and *around*. [**SLIDE: features a black and white image of an open hand with the word “Listen” written on the palm]** Thanks.

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