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Breaking Glass: A Pedagogical Approach to Understanding Voice in Media

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ABSTRACT

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This dissertation aims to examine the remediation of voices in media, specifically focusing on the reproduction of voices across different genres and the pedagogical approaches used to teach writing and media literacy. Much of the extant media is created with practices that historically have excluded minority groups, such as people with disabilities and people who speak other languages in addition to English in the US. This project develops a theory of interstices, which are both physical and metaphorical spaces in genres that can become sites of intervention through the composition process. These interstices are burdened by their many complex relationships between other formal elements of the genre and medium as well as by the social contexts surrounding the text's production. To account for and name these relations, this project applies Thing Theory to understand the formal functions of the genres and will highlight unconventional examples of generic conventions of reproducing the voice. This project demonstrates examples of media that promote access and inclusivity by how they reproduce the voice and provide examples for instructors to use in higher-education classrooms, with the intention of addressing issues of inaccessible space in media.

This dissertation is dedicated to Stan Lee, who died the first semester of my PhD program,

and my parents, who are still alive.

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ACKNOWLEDGEMENTS

The first acknowledgement I'd like to include is to the many creators who loved their work and others' work so much to include "easter eggs," which are hidden messages in a work that points to semi-related works that came before it. These easter eggs do not add much—if anything—to the creation, but the practice of adding them is an act of playful creation that often brings joy to those who interact with the creation when they discover it. It's for that reason that I hid several easter eggs in this dissertation in the form of hyperlinks that lead to videos about semi-related thoughts and ideas I had while drafting this dissertation. They are not necessary to watch to understand the dissertation, but they include thoughts that I could not express in the academic register and can supplement what is in the text of this dissertation.

I would not have been able to complete this without the help of my advisor, Stuart Moulthrop, who never hesitated to get coffee with me whenever I worried that I did not have what it took to be in a PhD program or when I was struggling to think of what to write next. At the end of my second semester, Stuart told me how proud he was of my growth in the program, and his care and recognition of my accomplishments continued through the rest of my time here. I also owe the success of this dissertation to Shevaun Watson and Lane Hall, who not only showed incredible leadership throughout a pandemic but guided me to become a better instructor than I could have ever hoped to be. The readings they chose for the seminars I took with them and the way they modeled their own classrooms inspired my own teaching, which made me so keen to take a pedagogical approach in this dissertation. Lastly, I am grateful

for Thomas Malaby, whose dedication to the study of play and whose guidance helped me connect some of the most difficult ideas in my mind to words. Several times, I struggled to express my ideas in this dissertation, and a meeting with Thomas unraveled the mess into thoughts I felt ready to express.

I also could not have done this without the support of my colleagues: Laya, who personally made sure I was fed during my preliminary exams. Evelynn, who always made sure I made progress by joining me for writing in the library. Rachel, who I could always turn to for anything (and especially for a good venting session). Korey, who helped make my first livestream possible and who joined me on many holidays and special occasions, so I never had to celebrate alone. I also want to recognize Krista-Lee, who was always there to help me with games pedagogy and streaming (and some geeking out over Irish music), and finally, Kayla, whose care and persistence inspires me to always keep fighting and to keep spreading kindness in the face of adversity. I also would like to thank my friends Kati, Luke, Nick, Jeff, Bobby, and Jacob for our weekly D&D sessions throughout the program, which gave me something to look forward to at the end of the week. I'd especially like to thank Kati for proof-reading the entirety of this dissertation. Additionally, I would like to thank Ren, Andrew, George, Kip, Rae, and Morgan for streaming hours of D&D with me in the name of research and fun.

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listening to me when I needed to talk, and taking care of me when I was sick and recovering from major surgery during my third year of the program. I owe my sanity to my dogs, Payton and Bowie, who supplied plenty of snuggles and company in the absence of being around my family. Lastly, I'd like to thank the support of my partner, Ben, who helped motivate me to finish this dissertation by reminding me that our wedding invitations can't say Mr. & Dr. unless I finish this thing.

So, without further ado, let's get started

Prelude: An Introduction

Scholarship regarding the representation of voices often focuses on using "voice" to mean "perspective" rather than focusing on the voice in its literal definition: the sounds that people produce to communicate. These conversations ask questions such as who is at the table and which voices we are hearing in a particular issue instead of how voices are represented, remediated, and trained to be used in different contexts. Rarely do we see the physical voice brought to the fore in conversations regarding media creation and how the conventions of various media forms are used to exclude certain, literal voices and their associated people. Inquiries into perspective do not focus on the aural qualities of voices, how they are represented in media, or how those representations affect our understanding of the people to whom those voices belong. However, we do consider these concerns when we think about the literal voice and its mediation. Furthermore, the process of the reproduction of voices across media affects the receiver's understanding of the voice, especially when the reproduction goes beyond its aural qualities, such as with comic books, paintings, and other visual media. Because people use media a means to express and learn ideas, it is crucial to identify and eliminate unnecessary barriers that preclude entire demographics from composing or seeing others like themselves composing in various media genres. It is also necessary to investigate this problem because if people's contact with a specific demographic is limited or deemed "not good enough" to be used in certain media forms, then misguided and negative myths and assumptions might be formed about those demographics.

In this dissertation, I will analyze the reproduction of voice in comics, video games, and podcasts with the goal of understanding how mediated voices relate to questions of voice in

the production process. Based on this understanding, I then suggest pedagogical approaches to writing and media literacy to offer students the tools and questions to make more equitable and diverse media productions. I chose these three forms of media because I intend to demonstrate a spectrum of sonic media where sound is reproduced from most visual to most aural. Comics reproduce sound through visual effects. Video games rely on both sonic and visual cues to reproduce sound, while podcasts rely almost entirely on sound for the listener. Each medium will have a dedicated chapter where I will explore unconventional examples of generic conventions of reproducing the voice. In other words, I will highlight instances within these three forms where the text upholds conventional form but operates in a way that creates a space for that form to work differently and therefore presents an evolution of the form. The language of this dissertation is geared towards instructors who teach First Year Composition in colleges with a multimodal focus as well as media instructors, though any teacher may find some use in the information that follows.

Each chapter will be accompanied with methods of applying this information to First Year Composition (FYC) classrooms because the goal of this dissertation is to provide a template of ways students and future professionals in media can create content that normalizes and invites a wider range of voices. The choices creators make in what content they produce—such as "cleaning up" podcast audio by cutting sounds of people breathing or fumbling over a sentence before completing a "good take" of that sentence—are culturally loaded, rhetorical, and impactful. This dissertation will frame the understanding and intervening of exclusionary choices as a form of media literacy since current production norms uphold the expectation of "cleaned-up" voices, and that leaves little room for those whose

voices are considered less than perfect. Instead of considering how to make the voice fit the genre—a concept I will define in the following paragraph—I consider how to make the genre fit the voice. I will highlight examples of different media within their genre that maintain the functions of its generic conventions but simultaneously discard, subvert, or question how other examples use the same functions to uphold dominant narratives. Studying such examples provides scholars and creators a space to question how we create breakages in media within these conventions and for what social purposes. We can ask whom media conventions benefit. These breakages are the spaces I wish to expose in my dissertation so that we can highlight how creators can utilize them to be more accessible to a wider audience by shaping the media to accommodate diverse kinds of voices.

When I speak of genre, I mean "typified, regularized, and recognizable forms of communication" (Bazerman). Discussion of a genre's evolution in media studies often frames its evolution because of advancing technology that permits new affordances, such as sound recording technology and accessible home recording set-ups. In rhetoric, genres are often described as developing through repeated communication, adapting to a need or new context, and subsequently being reproduced so often that it becomes regularized and recognizable as a genre. My dissertation does not focus on a change of reproduction of the voice because of new technology, but on innovative approaches media creators use within their chosen form and as a rhetorical response. Although this definition of "genre" is indeed broad and risks a lack of specificity when I analyze comics, video games, and podcasts in later chapters, it remains to be more accurate than focusing on a specific medium or modality within the genre. It is more coherent for me to analyze the general elements that are seen in comics, for example, instead

of analyzing print comics over digital comics or webcomics. That is not to say that the distinction and specificity are not important, but it is not as effective as it is in other contexts to understand the analysis in later chapters. In this dissertation, I use "genre" to refer to the very broad forms such as comics, video games, and podcasts and "subgenre" to refer to more specific genres within that genre, such as a sports podcast versus an actual play podcast. I use the examples in my chapters not just because they both break and adhere to their generic expectations but because the elements of the genre that they break are applicable to many subgenres within that genre as well. I encourage instructors to take the arguments in this dissertation and apply them to more specific definitions of genre and to investigate how these ideas are inapplicable or need adjusting as they are applied to texts of different subgenres, modalities, and mediums.

I maintain that the pedagogical portion of my dissertation is essential to my work in understanding voice in media because, without action and practice, the work is incomplete and self-serving. My mode of action is to teach voice-based formal analysis as a part of media literacy because it will not only make a more accessible classroom environment by actively inviting conversations that encourage consideration and diversity, but also because students within these classrooms have been given the space to practice creating media that is less exclusionary. Patricia Aufderheide defines media literacy as "the ability of a citizen to access, analyze, and produce information for specific outcomes." The library at the University of Wisconsin – Milwaukee has a similar definition in their supporting research guide modules that defines media literacy as "the ability to access, analyze, evaluate, and create media", but additionally explains that "Media Literate and Critical Media Consumers are better able to

understand the complex messages we receive from television, radio, Internet, newspapers, ... and all other forms of media". Although media literacy is not limited to analyzing voice in media, it is a focus point teachers can use with their students to develop analytical skills that can be applied in other contexts of analyzing and composing media. Furthermore, learning media literacy allows teachers to engage in discussions with students about their other literacies and how they can deploy these combined skills in different contexts for different purposes. For example, a student who may struggle with writing prose may have an easier time recording a video expressing their thoughts, and the act of writing an outline for that video could be a building block that allows them to practice writing prose while simultaneously practicing media literacy. Kate Vieira states in her ethnography, *Americans by Paper,* that

> ...regardless of whether we are cognizant of it, when teachers and administrators intervene in a person's literacy development we are also intervening in history, aligning ourselves with particular ideologies of literacy and distancing ourselves from others, with consequences for how students use literacy (4).

While reading and writing literacies are indeed important, they are not solely developed through reading and writing prose. Pedagogical methods that are so rigid that they never allow students to practice in a way that lets them compose and understand information run the risk of limiting what knowledge is shared across their students' entire lifetime. This then affects what others could have learned from that student had they been given the opportunity to practice different literacies in school. I stress that my dissertation is concerned with consequences and responsibility regarding the media that we consume and produce. Every choice has consequences, and those who make choices bear the responsibility for those

consequences. How we as instructors align ourselves with our pedagogical choices and encourage students to understand the weight of the choices in their own compositions has repercussions far beyond the walls of the classroom.

New technologies have historically provided better social access to a range of marginalized people—and while the continued advancement of these technologies is necessary, I will center my research on how we can use what is *already available* rather than invent new technology to create and teach voice reproduction across comics, video games, and podcasts. This can be done by recognizing interstices in media and using those spaces to adjust how one can create media within that genre. Media interstice is a concept I will explain later in this chapter, but in short, it involves seen-yet-unseen spaces of possibility. Additionally, I will discuss how groups of people are excluded in the dominant use of these genres so that it is explicit that the lack of vocal diversity is not exclusively the fault of undeveloped technology, but because of the rhetorical choices made by those creating works within these genres. Although this dissertation references many different theories and ideas, the main focus remains on teaching media literacy and making accessible media.

Pedagogy

Although composition pedagogy can take many forms, the focus of my research resides within pedagogy that speaks to embodiment-based pedagogy. Scholars such as Anne Wysocki and Steph Ceraso work extensively with these concepts, especially in relation to multimodal rhetoric. The conversations that come from their applied theories and subsequent projects

create a framework we can emulate for more equitable classrooms. In her book, *Composing Media,* Wysocki writes:

> Our relations with our media matter... we therefore need to consider our engagements with our media if we and the people in our classes are to learn about our embodiment and so what we consider ourselves to be and to be able to do in our worlds. Those of us who teach writing need, then, to consider media … and to ask how such media engage with our senses and contribute to our embodiment. We need to do this both theoretically and in praxis (4).

Wysocki draws attention to the fact that composition instructors must consider different media in the classroom in addition to their relation outside of it as well. Beyond that, we must consider how our different senses of selves shape our reception of different media and how we enact those embodiments on media we create. She states that our experiences of embodiment can be both passive and active (19), which aligns with media scholar N. Katherine Hayles, who says in *How We Became Posthuman* that "embodiment is contextual, enmeshed within the specifics of place, time, physiology, and culture, which together compose enactment" (196). Our embodiment experiences can be passively shaped by the media we encounter in a multitude of factors, including the parameters set by the media–such as the options available for avatar creation on websites and games, or the pathways we naturally walk based on the boundaries of architecture on a campus. Alternatively, they can be active choices we make–e.g., choosing what our avatar looks like after considering the options presented to us by the game or website, or recognizing an alternative pathway that may not have been the architect's intended path of travel and choosing whether to go the new pathway or not. Jay Dolmage

draws a connection between embodiment and rhetoric by defining embodied rhetoric as "the circulation of discourse through the body" (2013, 5). Embodied rhetoric allows an additional layer of media literacy since teachers can encourage students to question what barriers exist—if any—that could prevent them or others from interacting with the text. Can any of these barriers be removed? Practicing awareness of embodied rhetoric allows students to reconsider what was originally deemed as "just the way things are" and question the implications of excluding certain bodies from being able to interact with the text.

Meanwhile, Ceraso works with embodied rhetoric and composition through rhetorical listening, which she describes in her book, *Sounding Composition,* as a practice that "invites listeners to take 'a stance of openness' by imagining how bodies different from their own might interpret or experience particular sonic situations" (152). By engaging in these practices, composition instructors can provide models for composition students to create texts that consider experiences beyond their own, as well as draw awareness to their own relations with the texts that they produce and consume. For my research, the composition classroom is key to intervening with myths about media that center on "just-ness" - as in, "it's just a show" or "it's just a sidewalk." Instead, embodied approaches to the composition classroom circumvent dismissive approaches to media and encourage both instructors and students to reconsider their implicit biases, habitus, and cultural norms. Rachel Buurma also argues for identity awareness in her book *Contemporary Proposals About Reading in the Digital Age.* She explains:

> The dispositions of both authors and readers have a bearing on the way the other minds of represented persons are constructed and received. Aspects of authors' and readers'

> intersectional identities, especially gender, have been hypothesized to play a significant role in co-creating experiences (133).

Buurma demonstrates the importance of recognizing different identities and how that affects the text, which is fostered through rhetorical listening, and conversations of multimodal rhetorical analysis. She synthesizes these issues by addressing them as dispositions necessary to create, understand, and experience texts. This issue can be linked back to media literacy because understanding the text's context, author, and purpose are integral for analyzing and understanding it. Additionally, if a student becomes more aware of the identities of those that create the texts, they can subsequently analyze if their information is coming from a small group of identities—and if it is, seek out information written by a more diverse range of authors.

We can draw other relations from embodied rhetoric through Jay Dolmage's book *Academic Ableism.* He explains that "if rhetoric is the circulation of discourse through the body, then spaces and institutions cannot be disconnected from the bodies within them, the bodies they selectively exclude, and the bodies that actively intervene to reshape them" (43). With this, we can consider the connections for both physical and abstract concepts of body and space – for example, Dolmage is referring to physical spaces and architectures that exclude others, but we can also consider this in terms of metaphorical space. For example, a film without subtitles gives little space for a person who cannot hear, and a person who refuses to listen to another calling for change gives little space for a genuine exchange of ideas. Additionally, there can be instances where physical and metaphorical space merge, such as when a paltry gesture of accessibility is given through means of retrofitting, and criticism of the

retrofit is often met by passive-aggressiveness (77). The physical space—the retrofit—becomes the site of the metaphorical space of the argument. The contradiction between the physical and metaphorical shows a presentation of false spaces, which appear to be an appropriate space in the eyes of those not excluded yet make it more difficult for those who had a right to that space and were still excluded despite the space appearing open. These retrofits hinder progress and accessibility due to the habitus of ableism rather than creating spaces for conversations on how to account for different bodies and using universal design instead. Challenging these cultural perceptions is necessary, but it is also difficult. Dolmage writes that "spaces already convey information and reconstructing or reimagining these spaces is an act of persuasion" (42). By changing these spaces, we are changing the ideas that create them as well as actively questioning the rhetorical choices we are making regarding what bodies are allowed, what bodies will be allowed with difficulty, and how we are imprinting our own sense of selves on this space.

Disability Studies allows us to challenge the academic and professional spaces that socially disable groups, exclude groups, and create hostile environments that deny people access to places they belong. Instructors do not have to be, but sometimes are an agent of social disabling through their pedagogical practices and dispositions. Considering Disability Studies will provide instructors a means of unlearning their biases, choosing texts that challenge able-bodied expectations, and creating spaces that are more equitable to a wider range of people. Additionally, Disability Studies provides new ways of creating media production that can set standards for new genres, expectations, and practices. These new practices will enrich media creation and even have the potential to inspire new technologies

and new features in existing technologies to accommodate a wider range of media creators. Discussions of embodied rhetoric in the composition and media classroom demonstrate the importance of how we represent and mediate others because it requires us to consider how those representations and mediations affect them and how there may be other ways to convey this information besides what we are used to. As I stated at the start of this chapter, although there are many conversations at play already in terms of represented voices and discussing who is at the table, there is less work done on how we choose to aurally mediate specific voices and manipulate these voices to present to wider audiences. Because the voice is a very physical part of the body, analyzing voice in media provides an effective anchor for students to understand how much human bodies are a part of texts—both author and the people they write about.[1] This dissertation seeks to limit the number of aspects of composition that are "unthought" and "unseen" because what goes unthought and unseen often perpetuates hegemonic norms and creates unnecessary barriers to many minority groups.

From the examples above, I hope my point is clear that there is a myriad of pedagogical practices, studies, and considerations that guide this dissertation and my study of voice in media. Students deserve inclusion and have a right to access information and instruction that help advocate for the creation of inclusive, diverse spaces. The practice of teaching inclusive media, even at the FYC level, allows students to question and seek out interstitial spaces—a concept I define below—so they have the authority to adapt media genres to fit their voices and subsequently learn to question the practices that made examples of that genre—or the

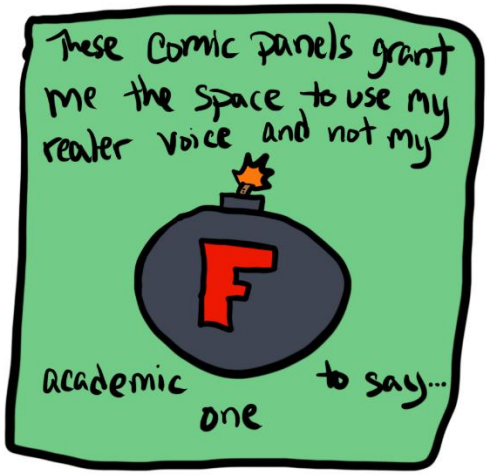
[1] I understand this is a very anthropocentric take. This is not to say that nonhuman bodies are not important, but that this dissertation focuses on humans for the sake of coherence and brevity.

genre as a whole—previously inaccessible to those voices. Writers have a right to express themselves. They have a right to an education that teaches multiple literacies because they have a right to express themselves in whatever means that exist, and that expression should not be limited to simply what is deemed "important" in one aspect of their lives. School and work are only two facets of a whole human, and a whole human cannot be satisfied with learning how to write for one or two aspects of their whole being. I liken genres to words. If we were only to teach formal, text-based writing, it would be as if we only used the word "beautiful" to describe things that are appealing to us. By limiting our writing world to the word "beautiful," we would then fail to experience alluring, exquisite, ravishing, and magnificent. Even now, in my own dissertation that is meant to be a culmination of my original work and a decade and a half of post-secondary education, this genre is not enough, and this register is not enough to voice everything that is in my mind and heart...


Because, let's be real...


My dissertation Committee wouldn't want me to swear here. It's not appropriate in an academic genre.


But I wouldn't feel like my feelings are TRULY conveyed without setting off one F-bomb
F


These comic panels grant me the space to use my realer voice and not my academic one to say...
F


We need to teach & let people compose with comics not just for accessibility, but because it's F un!

Theory of Interstices

It was the two-year anniversary of my move to Milwaukee, and I was reminiscing about the chaos of my move while working through writer's block on this dissertation. When I moved to Milwaukee, I fit as much as I could into my 2015 Nissan Versa Note and deemed it too full to pack anything else. My mom, who is a pro packer, took one look at my average packing job, moved things around, and then nearly doubled the number of things I fit into the car. It reminded me of a story that circulates plenty of spaces about the philosophy professor who filled a jar with rocks, and people said it was full. Then, they filled the empty spaces with sand, and people said it was full. Then, they filled the remaining empty space with water. While this story is one about prioritizing things in our lives, it made me realize that that is how media creation can work. We can say that there is already "enough," as I did with my car. We can already say it is "full," like the jar in the story. However, there is so much space left, and it is right in front of our eyes. We do not need to change the container but should instead reconsider what we put in that container and how we arrange those things. The thought of these interstitial spaces helped me move past the writer's block and frame the arguments for this dissertation.

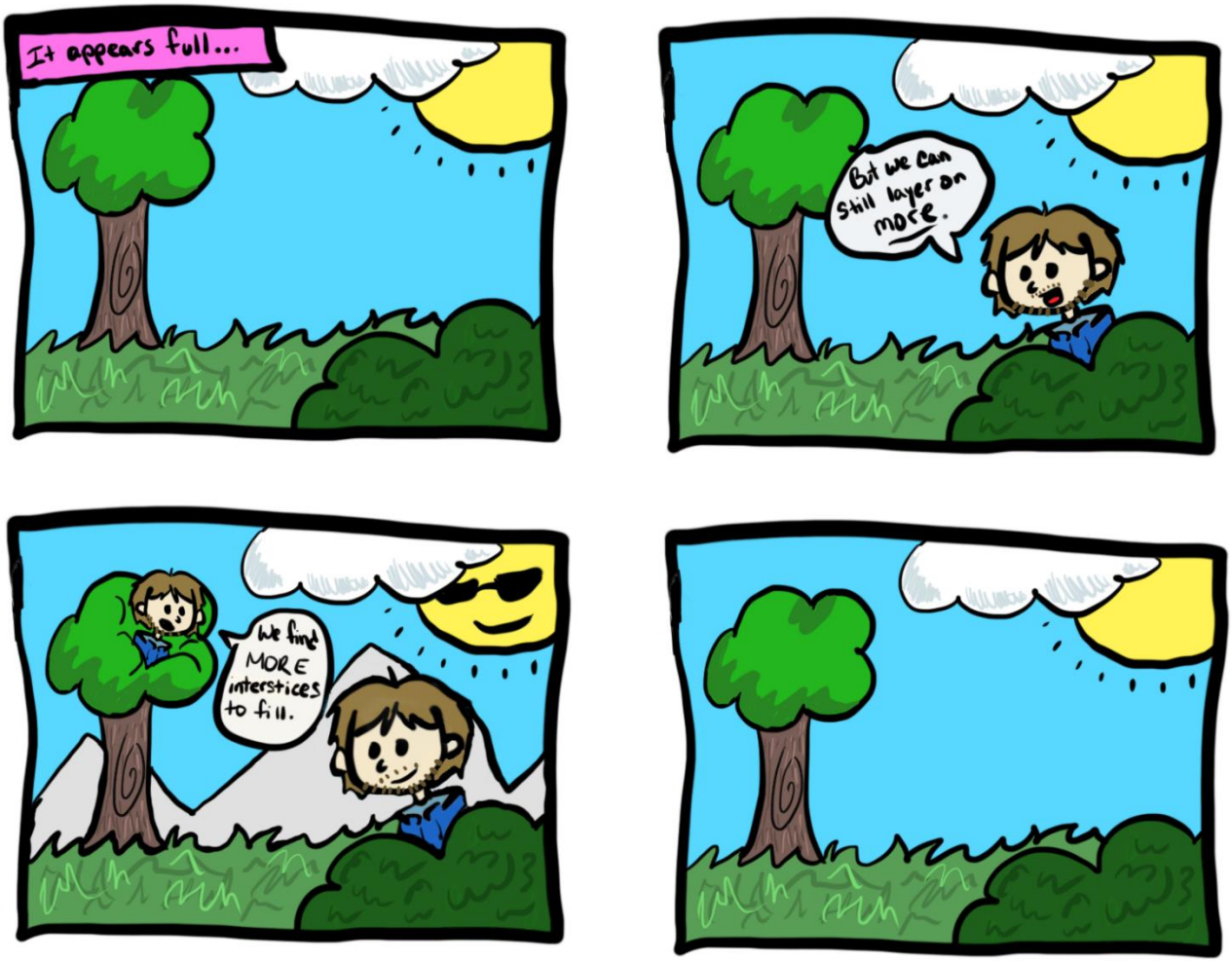
One of the most difficult things about theory for me is its lack of physicality. There is nothing to grab, to point to, to draw physical connections between... The only way I have a chance of understanding or conveying theory is through metaphor, and even that kind of remediation feels imperfect because fitting this abstract, ephemeral *thing* into a concrete container inherently changes it. A teacher cannot demonstrate theory like they can teach a proper violinist's bow grip or how to hold a pencil. A teacher cannot show off an idea by giving

an object to a student and proclaiming, "this is the theory!". However, through metaphor, a teacher can take an intangible theory and relate it to something more material. Although the remediation of theory to metaphor is imperfect, it provides a frame of reference that all parties can anchor to; from there, they can discuss the theory in more concrete terms. The arguments I presented for new methods of teaching media analysis lack a framing theory, which led to my development of the theory of interstices. Traditionally, interstices are intervening spaces such as gutters between comic panels, the space between floors in a multi-story building, or even non-physical spaces such as a short layover between two connecting flights. Interstitial spaces can be considered both full and empty at the same time, and just as they intervene between things, they can be used as intervention. For example, if a building is prone to overheating, a cooling system can be installed in the interstitial space between floors to allow better ventilation. It intervenes in the issue of overheating. These spaces also exist in media and can be used to analyze different media forms and can be subsequently manipulated for different purposes and contexts.

Regardless of *how* media makers are taught media composition—be it through formal education, informal advice from others in the field, or YouTube videos from hobbyists—there is an extant set of "best practices" and expectations to which creators adhere. This holds true for every stage of the creation process. Scripts are formatted in certain ways depending on the genre. There is a repertoire of camera shots that are used for different purposes—it would be considered poor form to use an establishing shot showing the entire scene while two characters are in deep conversation. Technicians set up microphones in a way that captures audio that ideally brings ease to the post-production team. At each point of the production process for

every genre and medium, there is measureless thought and artisanship that is poured into the container before it is passed down to the next handler to continue the production process. What I intend to highlight are the interstices at these points and in the final product so that pedagogues in First Year Composition (FYC) and media courses can encourage student exploration into these interstices. Once the student identifies the interstice, they can ask questions such as: What am I putting here? Why? Who am I excluding, highlighting, diminishing, and emulating through these choices? What can I do differently? There is a surplus of elements to media, but for the purpose of this dissertation, I will focus on the reproduction of the human voice in media, though the questions and ideas brought forth later in this project can certainly be applied to other elements.

One example of a media interstice is the space that is used to view movies. Everyone in the film creation process knows that the film will end up on a rectangular screen—be that in a cinema, on a television screen, on a tablet, or on a phone. While the size of the screen varies in all these examples, the bottom line is that the space will be rectangular and placed in front of its viewers. The screen starts off blank, and then the film content fills it.



But sometimes, the bare minimum is all that you need.

Put simply, my theory of interstices is that spaces exist both seen and unseen, abstract and concrete, and those interstices should be sites for intervention for adapting the content to be made more accessible. This theory can be used to guide the practice of teaching and creating different media where people can analyze the text and understand how different formal elements of the genre were manipulated to accommodate what needed to be done to make the text more accessible. Utilizing interstices in media operates with four main steps, though one could argue that there are micro-steps in between: Identifying the interstice, connecting the interstice to an issue or need, composing a text that uses the interstice to intervene with that issue or need, and then monitoring how the text is used and received by its audiences. The first two steps can happen interchangeably since the author might identify an issue and want to compose something to bring awareness to the issue, and later identify the interstice that can be used to create the intervention. In the last step, the author(s) of the text are not the sole entity working with the text. When the resulting text is monitored, it is also monitored by its audiences and anyone else who chooses to interact with it for whatever purpose. Just as a recorded voice no longer belongs to just the body that presents it, the text is no longer just for the rhetor to manipulate, interact with, and use.

The reason I choose to relate my theory to interstices is that an interstice is surrounded by so much *stuff,* and yet has enough space to put one more thing in it—very much like how media has so many elements in its creation and presentation, but there is also space for more. Media is in constant flux as new technologies permit new methods of production and with ever-growing political and cultural landscapes demanding constant reflection. At every point in the creation process, media makers make decisions on what to include and exclude, how to

compose the visual and aural components of the piece, or what vocabulary and auxiliary elements they want to employ to convey their work to their audiences. It is important to note that while media makers are beholden to marketability and creating content that their audiences want to consume, accessible media and marketable content are not mutually exclusive. Universal Design should not end in the classroom, but there *are* cases where what is most equitable and just is not what the masses want to consume. My chapter on podcasts provides some mediation between the conflict of marketability and equity, but ultimately my dissertation's focus is on creating diverse and accessible media to be used in spaces it will be well-received.

An example of an interstitial space for voice in media that can be used to start conversations with the questions above can be seen in *Dungeons and Dragons,* a tabletop roleplaying game. Below is a staple spell in the game called "Sending." The spell reads,

> You send a short message of twenty-five words or less to a creature with which you are familiar. The creature hears the message in its mind, recognizes you as the sender if it knows you, and can answer in a like manner immediately. The spell enables creatures with Intelligence scores of at least 1 to understand the meaning of your message (253).

The spell sending is entirely telepathic, meaning that it bypasses the physicality of producing the voice. This affordance is one interstitial space—a Dungeon Master may represent the character's voice as the players are used to encountering the character because there may be nothing different between their speaking voice and the voice they imagine for themselves in their mind. However, the Dungeon Master has the ability now to change how the players

perceive this character by showing how the characters perceived themselves, or how a disability or characteristic affected the translation of inner thoughts to the physical voice. A character who is transgender may have a feminine voice in the telepathic response, whereas their physical voice is deep and booming. A character with a stutter or a nervous lilt to their voice may speak through the spell without pause and hesitation. Because the spell indicates that the player knows the sender without the sender needing to identify themselves, it saves the character from having to justify who they are and allows the player to focus on this new way of understanding the character.

This spell transcends language and intelligence—a creature with an intelligence of 1, as the spell specifies as the minimum intelligence required for comprehension, would be akin to a rat or fish. These creatures typically would not be able to communicate with a player, but even without formal language, a player will be able to understand what the creature means. However, we can extrapolate to larger, linguistic, and cognitive demonstrations. No matter what is said in the message, the recipient understands its meaning and knows who the sender is. A Dungeon Master may say that the player hears a set of words, but then elaborates on what the character meant by those words. From there, the players may realize that the entire time they verbally communicated with the character—perhaps a mentor figure—and they said the word 'mijito' when referring to the player, the word held much more affection and familial consideration than the player originally understood. It reveals that the bond goes beyond mentorship to fatherliness, and that revelation did not necessitate the sharing of the language from which the term of affection originates. This one aspect of a game with thousands of pages of content allows for a rich extrapolation of human experience. It is not the only way

this spell can be used, nor is it the only way a Dungeon Master may use the game's rules to highlight aspects of a character's voice and sense of self. However, this small aspect demonstrates that interstitial spaces are everywhere in media and creators can harness these opportunities to reproduce and represent more voices, experiences, stories, and aspects of humanity. By merging media literacy and theory of interstices, students can analyze genre forms and seek out spaces within the form that can subsequently be molded to communicate its contents differently than it was traditionally used for, such as with the case of "Sending" from *Dungeons and Dragons*.

Asking students and creators to consider these interstitial spaces is asking for a practice of metacognition, self-awareness, and intersectionality. It asks for rhetorical listening[2] and suspending our own perspectives briefly and to "believe as if." What this means is even if one's gut instinct is to disagree, one should—just for a moment—believe as if what is in front of them has merit, value, and truth to the perspective that the other person brings forth. Every person has their own frame of reference, and when creating media, people often must include frames of reference and experiences that do not align exactly with their lived experience, and one cannot accurately or justly represent experiences they haven't listened deeply to. These practices will also give more value to people who *have* lived those experiences so they can share them with those who want to represent those experiences, which will ensure that diverse experiences do not merely have space at the table, but are actively sought out and invited to join. This is not intended to be a one-size-fits-all practice or a catch-all solution, but it is meant

[2] Defined by Steph Ceraso as a practice that "invites listeners to take "a stance of openness" by imagining how bodies different from their own might interpret or experience particular sonic situations" (152).

to be a small set of tools in a teacher's toolbox to instruct students with practices that encourage equity and social justice.

Thing Theory

When students and creators use interstices to create more diverse and equitable media, it changes the nature of the media and its creation. It does not *entirely* change the text—a video upholding unthought biases and a video made by manipulating interstices are both videos—but it creates the space to call a video by another name, which also turns it into other things. The video is not just a video, but a site of representation or a site of protest. It can be the exigence for inspiring their viewers to some sort of action. Although videos made through exposing interstices are not solely capable of being multiple things at once, to use them to their capacity requires understanding the full liminality and multiplicity of media. For this, I turn to *Thing Theory*. In *What is a Thing?*, Martin Heidegger explains that a thing can, in part, be defined by its function (25), and in *The Question Concerning Technology*, he challenges the casual power of something's thingness by arguing that technology's thingness lies in revealing or "bringing-forth" (13). Meanwhile, Bill Brown explains in his article, *Thing Theory*, that our understanding of things depends on moments when things cease to function for us (4). Brown's definition builds on extant theories with phenomenological roots. My dissertation focuses on the metaphorical, interstitial space between "functioning" and "ceasing to function," and the interstitial spaces are spaces that, in and of themselves, reveal the artifice of how we structure and organize the media that we create. By examining this space, we can then consider how media can evolve to accommodate new modes of telling stories without having to change the formal function of the genre or invent new technology. Additionally, Thing Theory can be used

to challenge what constitutes as "functioning" and "ceasing to function" because a thing may not be defined the same way by different people. For example, if a mute person communicates through assistive technologies, some might argue that their voice "does not work," while the mute person can argue that their voice *does* work, but it is produced by something other than their body.

Thing theory, like interstitial spaces, is tricky because it attempts to etherealize the material while also materializing the ethereal. For example, sailors of the past mapped disembodied howls of the wind through glaciers onto imagined sea beasts that roar from deep within their lairs (Bloom 2007). People do not need to see the door to picture the heavy, wooden object when we hear it shut in the frame (Mildorf 2016). Additionally, a disembodied voice is not always entirely removed from the body. In Pooja Rangan's chapter, "The Skin of the Voice," she explains how voices and accents are marked by race and gender, thereby encumbering those voices with the imagined physical form of a person, and subsequently affecting how that voice is perceived by the listener. From these instances alone, humans have a tricky habit of imagining something physical when they hear a sound without seeing its source. Sometimes, we may mistakenly map the sound to the incorrect material object—consider the whoopee cushion. The sound may cause embarrassment even though it was the cushion that provided the sound and not the person. In the moment that the whoopee cushion is deployed, the sound is perceived to have come from the person and not the cushion, and people might giggle at the social faux pas. Dorothy Thomas and William Thomas propose that "If [people] define situations as real, they are real in their consequence" (572). Therefore, so long as people believe that the sound originated from the person, it is as good as if it came

from the person. Of course, once the whoopee cushion is revealed, the situation is rectified moving forward but it cannot undo the moments when reality was warped by the cushion. However, many media warp and redefine reality. Video games redefine movement by mapping the avatar's actions to buttons on a controller or mouse. Multiple media use "ding ding!" and "womp womp!" sounds to signal correct and incorrect choices. Neither of these are "real" ways to navigate in the "real world," but they become real within the spaces of that reality. They become tangible in these spaces, and sometimes, they affect their participants so much that these media-bound rules encumber the person to other spaces and contexts. This aural encumbrance is the result of sound marking, which Michel Chion describes as

> not predetermined but rather completely fabricated by taking up a given sound over and over again in the course of editing, associating it with place or with a situation, such that the symbolic role of incarnating and encapsulating the latter is conferred on it (5).

Thus, if a game creates a soundmark that is sticky enough to carry into other contexts, players may then associate those aural events in the "real" world with those heard in the game world. If they encounter others who played that same game, they may end up using memetic expression to vocalize a "ding ding" rather than telling their friend with words that they agree with what they say. Soundmarks that start off as arbitrary become signs through repetition and assigning meaning to the sound. The physicality of the sound does not change, but its meaning and function evolve through relationality and human action.[3] A soundmark exists because of its thingness.

[3] This is not limited to humans, however. Animals can assign meaning to sounds just as much, such as the case where my dogs know that the rustling of plastic packaging means that food is on the horizon.

There are other factors that complicate how we define things. It would be simple to describe the liquid inside of a pen that allows us to do things with said pen: ink. However, ink's *thingness* comes into question when we consider its function and relation to other things. If one were to write on paper with the pen, it would be less likely to be called "ink" as it would be called "words" or "writing." If one were to draw, it might be called "art," "a drawing," or "a picture." Alternatively, if one were to use the pen to color within the lines of a coloring book, it might be called "blue." In all these examples, the material status of the thing remained the same—it was always *ink.* However, its function and relation changed how one would perceive it. Heidegger rationalizes this phenomenon by stating that a thing's thingness is in part determined by space and time (27), which are things that do not belong to the thing and are not controlled by the thing. Heidegger posits that space and time are auxiliary to a thing, but this thought fails to account for relation and intent. It was not space or time that drew the picture or wrote the words, but *someone.* It took time for that person to interact with the thing and space to move through, but all these elements are moot on their own. Thing theorist Marcello Oreste Fiocco states that "if a thing could exist with no necessary connection to anything, then there would be no necessity in the world itself, that is, reality consisting only of each thing as it is in itself" (651), which corroborates the argument that things need relationality to have their thingness defined. Interstices operate in a similar fashion because their thingness can be changed through interaction and manipulation. What the space is and does changes depending on how it is used and the functions it serves to different people through its use. Additionally, interstices can be both physical and immaterial spaces, and they can be spaces hidden within spaces. This multiplicity gets to the heart of what makes Thing

Theory and my theory of interstices tricky: they are at the same time ephemeral, ethereal, and material. A more detailed explanation follows.

Leo Stein writes that "things are what we encounter, ideas are what we project" (44) to differentiate the physical and intangible aspects of things, but Bill Brown challenges this by connecting the two instead of separating them. He says that "[t]hings appear in the name of relief from ideas (what's encountered as opposed to what's thought), it is also why the Thing becomes the most compelling name for that enigma that can only be encircled and which the object (by its presence) necessarily negates" (5). The object of the idea materializes the idea—and at the same time it validates the idea, it inherently changes it by taking shape and materiality. The idea is no longer the idea but the mediated form of it. This differs from Stein's argument since without the projection, we would not have the encounter, and to attempt to pull them apart would be erasing their indexical relationship to one another. These theorists have a common element despite their differences: a need for relationality. The relation to *what* is the object of speculation for the theorists listed above, and one that I continue to ponder. I conclude that the relation resides with what people do and what ideas they cultivate. This dissertation is, after all, about humans. While I am not blind to the ways in which thingness can be affected by plant, animal, and nonliving matter, the way that I speak of things and their relations is within the scope of the observable and affectable range of humans. This then can be applied to the Theory of Interstices because these spaces are also indexical, changed through interaction, and different depending on people's relationship to the function that space currently serves.

Some theorists, such as Alexander Galloway and Mackenzie Wark, use personification instead of metaphor to make their theories more concrete. In their book, *Excommunication: Three Theories in Media and Mediation*, they relate media and communication practices to different Greek gods. Of the gods they use, Iris proves to be most appropriate for relating media practices to Theory of Interstices and Thing Theory. Wark and Galloway explain that,

> Iris differs but she doesn't defer. Unlike Hermes, she does not traffic in the foreign. She is a goddess of nearness. Hers is an unmotivated expressive surplus of expression. There is never anything lacking in what she communicates. On the contrary, there's always a little too much. Where with Hermes representation always falls short; with Iris expression always exceeds. The iridescent is the too-real (155).

We can consider the *thingness* of media in this definition – media are a surplus of expression. Media have elements that are overflowing but often overlooked because there is *so much*. It is difficult to talk about *everything*, and at the same time, it is difficult to talk about *one* thing because of its relation to the other elements of the medium. For example, a love letter delivered on the back of a worn, folded piece of receipt paper would invoke different assumptions than a love letter with the same message on high-quality stationery. Furthermore, the assumptions made would vary person-to-person as different people interpret the message and its medium. Subcategories of the thing emerge as people respond to it—they may go from simply calling it a "love letter" and start to distinguish "tacky love letter" from "the perfect love letter". The letter might even become the exigence for the couple breaking up, and its thingness changes from "love letter" to "the reason why they broke up". The thingness of media can also reside in the opportunities it offers, which we can relate to interstitial spaces.

These spaces—just like a thing's thingness—are nothing without relation and *interaction.* Until someone does something with it, it has little significance. The relationality necessary and indexicality required to understand Thing Theory assists with manipulating interstices because both theories necessitate thinking about spaces and things in a malleable way and that a thing's function and use by different people changes what it is, and that it can simultaneously be multiple things that are sometimes at odds with itself. For example, a comic speech bubble is a space where speech is conveyed, and if a bubble is empty, it is implied that no speech is happening. However, when the empty bubble is used to imply that someone is speaking but the character perceiving it cannot hear what's being said, then it is both filling its function (showing that someone is speaking) and not (the reader cannot see what is being said). This effect then can be simultaneously frustrating for the reader if they want to know what's being said, or validating to a reader who is deaf and often cannot understand speech through traditional means.

Galloway and Wark's example of Iris embodying expression, surplus, and the "too-real" demonstrates how media shapes the understanding of a thing's thingness. Prior to the metaphor, many would not think to relate a Greek god with the abstract concept of things. However, the mass production of print and digital books made it possible for me to read Galloway and Wark's work and share their passage with whoever reads this. We are now burdened together with this metaphor, but our understanding of this metaphor is unique to ourselves because we do not share the same mind. For me, Iris's thingness went from a god I haven't had to think about in almost two decades, to a beautiful, mercurial embodiment of possibility and all that cannot be perfectly described. She *is* theory. More specifically, she is the

kind of theory that can make a researcher cry in joy and frustration as they connect the multitudes of ideas from other scholars in constellations as present and untouchable as the stars in a way that makes *complete and total sense* for them, but requires *so much* unpacking, explanation, and reconnecting to make another person understand the basics of the idea, but never so perfectly that the researcher feels like their idea is *truly* understood. Iris is all that is missed, overlooked, or forgotten when an artist mourns the loss of his partner to AIDS with 175 pounds of candy piled in a corner for strangers to take, including those who would stand idly by as more are lost to the same illness that caused the candy in the corner.[4] Iris is the chance to understand that remediation is imperfect and incomplete, but useful for others to get a glimpse of the idea. Lastly, Iris is this paragraph, where I used her embodiment to allow my tone shift to how I truly feel about the vastness of the information available and work through my own shortcomings on how to communicate them, before I return to the authoritative tone expected in a dissertation as I shift to other theorists' work to convey how to relate media and thingness together.

J.L. Austin's concept of speech acts and felicity conditions can also help put into perspective the thingness of things and the breakages of interstices. In his book, *How to Do Things with Words,* he explains that words do not just mean things, but they do things, and for these words to have successful action, all felicity conditions must be met. These felicity conditions refer to circumstances both in and out of the rhetor's control that make a specific

[4] This refers to the art piece, "Untitled" (Portrait of Ross in L.A.) by Félix González-Torres. Although many pieces could be referenced here, the point of this reference is to demonstrate how much raw emotion, historical and cultural context, and other elements that go into a piece's creation can be easily overlooked or unknown when experiencing an art exhibit. Iris accounts for this surplus of expression that cannot be contained in a single piece and in a single experience of that piece.

act successful. For example, if two men in the state of Wisconsin decided to marry in 2013 and were both consenting adults who took part in a ceremony to get married, the felicity conditions were not all met because Wisconsin did not permit same-sex marriage until 2014. However, while this couple would not be married in the eyes of the law, the couple can still call each other husbands. They can treat each other as if they were married; they may set the date of the ceremony as their wedding anniversary and follow all other norms of a married couple where they *are* married in all senses except legal. This is not to lessen the importance of the legalization of same-sex marriages since many benefits, such as family health care, hospital visitation rights, parental rights, etc., all necessitate a legal marriage, but the two remain socially married. Despite the unmet felicity conditions, the couple did get married for the purposes of showing love and commitment to one another and legal barriers do not stop them from calling each other "husband." That breakage creates the interstice of questioning marriage in social versus legal terms. Thus, we have the marriage[5] of interstices and thingness: the interstices constitute the potential for something different, and thingness resides in relationality.

To continue the thread of queerness, let us now consider how thingness relates to media. Although it was not the first sitcom to feature a queer couple, *Modern Family* (2009) was the first American prime time sitcom to feature an openly gay couple as regular characters. *Modern Family* follows three related families, one of which is a gay couple who adopted a Vietnamese baby, Lily. The couple, Mitch and Cam, are presented in the same way as the other

[5] pun intended.

married couples on the show, even though they are not legally married. At the airing of the show, same-sex marriage was not legal in the state of California, the setting of the show. This scenario echoes the example of the broken "felicity condition" example above, and Alyssa Rosenburg notes in her 2010 article in *The Atlantic* the complexity of legal and social marriages in a sitcom. She writes:

> Their need for the legal protections and benefits of marriage may not be particularly urgent as long as the show sticks to generally light-hearted topics (somehow, I don't see *Modern Family* confronting issues like hospital visitation rights). But given that the couple is raising a daughter, the legal state of their relationship has implications for her well-being and future... But at a time when equal marriage rights are a state-by-state battleground, *Modern Family* might considering making Cam, Mitch, and Lily legally, as well as socially, equal with the other families on the show.

Rosenburg acknowledges the difference between legal and social marriages, and the kairotic interstice[6] of television choosing to highlight the married-ness instead of the not-technically-married-ness of the couple since *Modern Family* is a sitcom and not a legal drama. However, once California legalized same-sex marriage in mid-2013, *Modern Family* opened its fifth season the following September with Mitch and Cam legally marrying. Here, we can see the thingness of Cam and Mitch's marriage due to how different demographics responded to the same thing: their marriage. Their marriage simultaneously meant a poison to America (Frazier), another

[6] Since interstices are spaces of potential and prime time television often addresses contemporary and contingent issues, one can argue that television has a kairotic interstice where showrunners can harness the fact that TV is kairotic and use political events like passing marriage equality into law to tell different stories than if TV was not so kairotic.

example of the forced heteronormalization of queer couples (Smith), revenue for the show (Fink), an immediate fictional response to nonfiction legislation (Yahr), and a shift away from homophobia (Rosa). The marriage is singular and plural at once since it does not mean the same thing for all. Unlike the pen and ink example above, the marriage does not change form or purpose. Its plurality instead comes from those who witnessed it and responded. The interstice in this case is immaterial because the showrunners embraced the kairotic nature of television when writing the episode to respond to the legalization of homosexual marriage. An example of an interstitial space that is more physical would have been if the showrunners had included a banner on the lower right-hand side of the screen with a website link to donate to an LGBTQ nonprofit because they could expect the viewers to have their attention on the screen and also be able to see the banner while watching the show. So, I conclude this section by determining that a thing's thingness—just like interstitial spaces—is a mediation of infinite expression and ideas amalgamated from both the material and intangible, created in cacophony between all those involved in the thing's making and all those who interact with it.

Sound and Voice

The field of sound theory has provided us with a multitude of contributions to understanding the phenomena of sound, how we perceive sound, technologies of the reproduction of sound, and ways that different sounds are used across media. Scholars such as Michel Chion and Rick Altman investigate sound reproduction in media, especially films, while other scholars such as Jonathan Sterne and David Howard examine technologies and spaces of sound. There are those like Karen Collins, Michael Gaudio, and Sarah Kozloff who investigate sounds in specific kinds of media, and then others such as Ingo Titze, Virgil Anderson, and Kristin Bijsterveld, who study

the staging and practices of recording sound. My laundry list of scholars here is not to prove any clout of being well-read, but to demonstrate a multitude of ways of approaching sound and a growing need to consider sound theory and sound studies as deeply integrated with many subjects rather than an isolated field of study that can be applied to other fields. Additionally, our understanding of sound is deeply tied into materiality and other modes of sensing, which certain aspects of sound studies—such as technologies of reproduction—may not be able to effectively encapsulate. Studies of sound account for many aural phenomena such as sound effects, noise, speech, and music—and many of these scholars work with a combination of these phenomena, because they are interrelated. However, there are distinct differences in perception, function, and modes of reproduction of these aural phenomena and within each phenomenon are different practices depending on media genre. For example, the way one would produce sound for a video game would be different from a television show, and noise encountered in a livestream would be treated differently than noise in a podcast.

As new genres and genres within genres arise, new practices and expectations evolve to accommodate them. For example, in traditional broadcasts, background noise is considered distracting and is expected to be suppressed. However, as the live streaming of video games becomes more popular, background noise such as keyboards clacking and mouse clicking is appealing to the audience because some find that "a little clicking and clacking during videos helps to immerse the viewer as it's like they're right there playing with you live" and "it makes things a tad more authentic" (R/letsplay). This practice of "authenticity" contradicts the current models of capturing sound and ambience that is not what naturally comes from the source, but instead is a carefully produced imitation of the sound source. For example, Foley artists perfect

the craft of sound effects in films, games, and other media by acting out what a sound is "supposed" to sound like, and many of these effects use props to replicate these sounds. Breaking celery imitates the sound of breaking bones. Waving leather gloves imitates the sound of flapping bird wings. Clapping coconuts together imitates the sound of horse hooves. There are a multitude of reasons why Foley art is an appealing approach for media, but it is important to consider the purpose and implications of these choices, and whether those choices are appropriate and appealing across genres. The background noise of a clicking mouse may be appealing in a gaming live stream, but less so for a true crime podcast. Instead of considering extant and "best" practices as the way something is meant to be made, instructors can instead focus on the function of each practice and encourage students to look at the space/interstice that the practice manipulates and consider how different audiences, contexts, and subgenres may be manipulated differently in order to achieve their goals.

I bring up verisimilitude and choice because media shape our understanding of ourselves and others, meaning that the choices made in media composition have impactful consequences. In *Soundscapes of the Urban Past,* Karin Bijsterveld explains how recreations of historical soundscapes rely on historical texts such as journals where people of the time period describe the things they overhear (14). In these surveys, creators and historians also attempt to determine their attitudes in response to the different noises they encounter in their geohistorical context (16). For example, she references Alain Corbin's work, *Village Bells*, which is a work that surveyed the acoustic landscapes of 19th-century French countrysides. She writes that this work "revealed how bells not only structured the villagers' days and mediated news in ways we would not be able to understand today, but also how they contributed to people's

spatial orientation and expressed the symbolic power of towns" (16). She explains that when studying and recreating historic soundscapes, people must consider the habitants' ways of listening, what sounds they attended to, why they attended to them, what were the definitions of tolerable and intolerable sounds, and what factors led to these conclusions. When I call for teaching and including more diverse representations of the voice, it is not only to bring justice to those who live today, but also to ensure justice for people in the future who will rely on archival materials to understand ways of life from a historical perspective. Many marginalized groups have suffered the effects of misinformation, lack of information, and entire erasure of histories that deny these groups access to knowledge of those that came before them, and those that do not belong to these groups may come to the incorrect conclusion that the conversations about these groups have not been held before. Too often, queer histories and histories of other marginalized groups are expunged or simply not taught, which leads to the myth that the main contributors to society are the ones whose records are most popularly preserved and disseminated. Normalizing and preserving a more diverse representation of voices allows people—both present and past—to learn about and understand others with experiences different than our own.

Fortunately, there are some works available to aid in this endeavor. Rhetorical theorist and pedagogue Steph Ceraso writes in *Sounding Composition* that "listening practices are not merely contingent upon words but are also shaped by context-specific embodied experiences" (16). When considering the voice, it is important to consider how its audiences attend to the sonic events as well. Media are an ecosystem contingent on the sociocultural milieus in which they reside, and it would be a mistake not to consider the lived experiences of the audience,

creators, and stories told—and how this affects creators' choices in how they reproduce the human voice. By investigating how these contingent, moving parts work together, we can have a stronger understanding of how we can discuss media in ways that focus on its sociocultural implications more than its entertainment or narrative qualities. We can draw a line from here to Arseli Dokumaci's work, *Disability as a Method,* which considers how Disability Studies can contribute to conversations in the classroom and issues around mediating voices. Dokumaci builds her argument on the concept of *the habitus of ableism,* which she describes as "how certain action possibilities are rendered unreachable, improbable, or simply unthinkable because of what has already been actualized, materialized and concretized" (14). This argument relates to the social model of disability, which describes disability in terms of an individual's relation to society – that a person is not disabled by their difference, but instead by the barriers enacted by society. The habitus of ableism described by Dokumaci in part influences the habitus of listening described in Bijsterveld's work. What people are conditioned to listen to and value affects *whom* they listen to and value. Virgil Anderson explains that people associate characteristics of the voice with characteristics of the personality (3), and that people are taught the attributes of what a "good speaking voice" is meant to be (17). Gina Bloom's exploration of voice and gender confirms Anderson's arguments as she observes assumptions of physical health based on the sound of one's vocal health (30), how the voice affects perceptions of masculinity and femininity (29), and how these perceptions affect the speakers' agency (187). Because people draw innumerable conclusions about a person from their voice, how we remediate the voice and frame what is tolerable has very real impacts. Bloom writes:

> If the voice is produced by unstable bodies, transmitted through volatile air, and received by sometimes disobedient hearers, how can voice be trusted to convey an individual's thoughts to a listener? And in a cultural climate in which speech marks political and social power, who stands to lose and who to gain when speech assumes this unsteady material form (3)?

To have so much of one's agency, character, and social capital rely on such a mercurial phenomenon is an injustice, especially when what is taught to be a "good" voice encapsulates a small demographic of people. Not only is it important to deconstruct why so much depends on one's voice, but we must also decode what was done to construct the canon of what a "good" voice is. Like many things, the consensus of what a "good" voice is depends on geographical, cultural, and historical contexts, so acceptable voices change with time and place, thus affecting how people perceive others across these contexts. The habitus of ableism complicates the idea of choice. On one hand, media creators make choices every day, and those choices include and exclude certain people. Those in higher-stakes positions must negotiate whose interest these decisions serve and a variety of other rhetorical factors, and while there is clear thought and reasoning, there also exists a level of "unthoughtfulness". Habitus hides heterodoxy and the structures that uphold orthodox beliefs. However, interstice theory seeks to reveal hegemonic structures within genres in a way similar to Bertold Brecht's *verfremdungseffekt*, which specifically reveals these structures in the realm of theatre.

As I stated earlier, it is customary practice to "clean up" audio and, by proxy, clean up voices in that audio. Voices that are too tinny will go through processing to bring out the middle and lower tones of the voice. Unstable voices will be equalized, compressed, and repackaged to

be more pleasant to the listener. Audio engineers eliminate filler words such as "um," "uh....", excessive breathing noises, and even entire portions of conversation that the engineer deems not relevant enough to fit in a 30-second clip that must end at 30 seconds "on the dot" so that the advertisement following the edited clip will run at its designated time. These practices follow a habitus of ableism, even if they may not appear so at the surface. To the radio broadcaster, it is "common sense" to have to do this—the station must play advertisements to generate revenue, and a two-minute phone call might lose the interest of listeners who do not want to hear the entirety of the phone-in conversation. However, to the listener who called in who had the stutter that was edited out for brevity's sake, or the listener whose long pauses in between thoughts were edited out, they now are confronted with a version of themselves that was made more palatable for the public, which implies that their authentic self is not palatable or profitable as-is.

Rey Chow writes in *Sound Objects* that once the voice is recorded, that voice no longer belongs to the body it came from (113). It transforms into a new thing that can be manipulated, replayed, edited, repurposed, and distributed to multitudes of people, many of whom have little to no context with the person who produced the original sound. In fact, it is expected in many fields to edit with the goal of appealing to the audience, and it is not often that media creators are incentivized to consider the person who generated the sounds that they are editing. Although the recording of the voice is no longer owned by just the body that it came from, the final production and how it impacts the original speaker should not be *unthought.* Studies have proven the dysmorphia that people feel about their own bodies when compared to Photoshopped models and film actors with a team of make-up artists and production teams

perfecting their appearance—so why permit the same to the voice? That is not to say that all editing is bad or that the original speaker must be part of all editing processes. However, I do argue that for "responsible editing," it must be common practice to consider what purpose the editing serves, and what is being explicitly and implicitly implied as the voice is manipulated. One example of responsible editing can be seen in WBEZ Chicago's *This American Life* episode 203, where a man's stutter is edited out for a poignant message. The man, Kevin Murphy, asks for his stutter to be edited out so he can "speak" to a person who was impatient with him. He says, "Today, I've spared you the inconvenience. I've edited out all my stutters and pauses to make it easier for you. That is what you want, isn't it?" (Glass). In this case, editors removed the stutter to feign a "normal" speaking voice to permit Murphy the opportunity to speak to his oppressor with the voice of an able-bodied person to challenge the habitus of ableism, and to confront the other's lack of patience by speaking quicker without a stutter. At no point is Murphy's natural voice treated like a hindrance in the podcast; instead, it is the bully's lack of patience that is marked in the episode. Halfway through the speech, though, Murphy asks for his voice to no longer be edited. Murphy wants to be heard as he naturally talks because, for him, his stutter is a part of who he is. For this episode, *This American Life* edits the voice to challenge ableist approaches to disability and to allow Murphy to speak as he cannot naturally, but frames his edited voice as *different*, not *better.* The editors did not approach Murphy's voice as ceasing to function, nor did they adhere to traditional editing practices because the context of the episode necessitated letting Murphy speak as his authentic self. What I call for in this dissertation is to teach composition methods like the ones in this episode, which use responsible editing practices and not hegemonic editing practices.

Outline of Chapters

The format of this dissertation is inspired by Steph Ceraso's book *Sounding Composition: Multimodal Pedagogies for Embodied Listening*. In her book, she has her theoretical chapters separated by "reverberation" chapters, which discuss and demonstrate her students' work that employ the theories explained in the chapter preceding it. Similarly, I have each of my body chapters separated by interludes that demonstrate student work showing the theories I explain put into practice. Although it is not a traditional organization of a dissertation, I argue that it is effective for demonstrating the core goal of this dissertation, which is providing a model for other instructors to adopt to promote media literacy and to remove barriers that make it difficult for minority groups to compose multimodal texts. The chapters and interludes are as follows:

Movement I – Comics

In this chapter, I address the history and uses of comic books in the classroom, the inclusion of multiple literacies, and how these practices address social and linguistic justice in education. I then shift to a media analysis of comic books and the functions of the genre and its formal elements, linking these ideas back to interstice theory. Using Neil Cohn's theories of semiotics and comics and Nick Sousanis' work that analyzes visual and textual practices of communication, I explain how sound and space are portrayed in comics. I then provide a case study of how *Hawkeye* #19 complicates the way sound traditionally works in comics, how we visually intake information from comics, and how people with disabilities are framed in fiction. I conclude the chapter with a final reflection on a comic's thingness and how they can be used in

FYC classes for students to compose work that accounts for a wider range of experiences than only text would be able to tell.

Interlude I

This is the first of three interludes that show student responses to different voice-based projects. All students' names are changed for privacy purposes and all students consented to their writing being used for research purposes. Here, I show the responses from my FYC students when assigned a passage of *Hawkeye* #19 in preparation their final project, where they must remediate their research into a public-facing document, which can take form in a genre of their choice. The point of this reading excerpt and short writing assignment is, in part, genre analysis through exploring how a work adhered to its conventions while also breaking them in order to expose the function of the genre and what can be learned from it. A secondary point is for them to see an example of inclusion where they are confronted with issues of disability and language expression. These responses come from a short series of questions, where students write no more than 150 words answering them. The assignment is intended to combine brief analysis of the content and reflection of how they can use the excerpt as inspiration for their composition within their chosen genres.

Movement II – Video Games

This chapter begins with a brief history of the technological limitations of sound in video games that led to tactical responses from game developers to accommodate these constraints. Over time, as technology allowed for more diverse sound, some games capitalized on these developments while others maintained their roots of symbolic sound instead of using literal

replications as one would hear "out in the world". I note the procedural mode of games that make players map movements on their remote to the character, creating an interconnected relationship between player and character, and how that relationship is used to convey meaning and maintain interest in games. I use the case studies of *Missing Memories* and *Binary Distortion,* two games that use sound and voice to replicate the experiences of two trans women.

Interlude II

In this interlude, I describe an in-class activity and discussion where students played two short games in front of the class and discussed game play as well as genre analysis. Unlike the short writing response in the first interlude, students participated in small and large-group discussions on different kinds of literacies expected to interact with certain genres, how different human experiences were remediated in these games, and how different genres had affordances and constraints to remediate these experiences. This activity was originally intended to focus on the remediation of human experiences and demonstrating diverse histories, but student-led decisions shifted the focus to include media literacies.

Movement III – Podcasts

In this chapter, I address a brief history of recorded audio and the proliferation of amateur and professional podcasting in the early 2000's. I focus on the pre-and-postproduction practices that are circulated in both academic and community spaces that create a canon of expectations of "acceptable audio". Using *Actual Play* podcasts, I analyze how the editing practices create unrealistic expectations of what play looks like, which affects how participants run games that

are not recorded but are still held to the expectations of a recorded "actual play" game. *Actual Play* refers to a genre of podcasts where people play tabletop roleplaying games (TTRPGs) and edit the audio to create podcasts that are subsequently distributed to a larger audience. Although there are still pedagogical roots in this chapter, I focus more on out-of-classroom implications for these practices than I do in previous chapters, showing how media literacies and practices affect contexts beyond the ivory tower.

Interlude III

The final interlude is the most in-depth assignment for my students of the three interludes. Here, my students were asked to compose a mini project remediating their voice to an audience of another who has not heard their voice before. The assignment was framed to have them reflect on how they manage this, since they are also practicing something similar with their final project. The final project remediates an earlier research brief they compose into a public-facing product in a genre of their choice, as well as remediating thoughts in their head to language and words for others to consume. Here, students reflect on their relationship with their voice, how others perceive their voice, the contexts in which they use their voice, and what external and internal pressures led to these relationships between themselves, others, and their voices.

Finale

In the final chapter of my dissertation, I explain the key takeaways of my work and what is at stake with teaching media creation and media literacies. Additionally, I reflect on the interstices of different genres—including the interstices of dissertations—to consider how the academic

process affected the information I pursued and created. Ultimately, this chapter serves to reinforce the argument I maintain throughout my work: change is in front of us, but often remains unseen and unthought. By seeking interstices, we subsequently find ways to bend—not break—traditional conventions to create more equitable practices that produce more diverse media.

Concluding Introductory Thoughts

Just as *things* do not have one singular use, meaning, definition, and context, my research and theory of interstices cannot mean the exact thing to different people. I can give metaphors and explain through pages of text and video, but there is no one true translation from one brain to another that can explain my heart of hearts. Even if I could, this information is instantly processed through the other's mind through their frames of reference, the contexts they already know, the contexts they imagine they can apply my research to, and by doing so my work is no longer my own—and that is how it should be. As the recorded voice no longer belongs to just the body that produced it, so is my research. However, so long as the intent of use and the result of use of this work is to invite diversity and cultivate justice for marginalized groups, I feel my work is *understood.*

MOVEMENT I – Sound and Vision: Visualizing Sound and Voice in Comics

This chapter is the first of three surveys into three genres, and in each, I will explain their qualities and which interstitial spaces exist in them. Although there are some similarities across media, each genre *does* have its distinct qualities. It is impossible for teachers to introduce every genre and its intricacies to students, but hopefully after learning to understand the idiosyncrasies of several, they will have practiced the dexterity to critically analyze ones they encounter outside of the classroom. Similarly, I encourage any instructors who read this work to adapt these concepts to genres they would want to teach to students if comics, video games, or podcasts are not suitable or possible for their classrooms. Although many FYC and media instructors are well-versed in using comics in the classroom, some may not be as confident in working with them. Therefore, I will start this chapter with a brief explanation of the many benefits comics have as a tool for building media literacy. So, with that said...Why comics?

Comics are rife with ways to convey meaning. Images, text, speech bubble shapes, colors, panel sizes, and a myriad of other elements exist in comics that both complement and contradict each other to make meaning, imply metaphors, and express lived experiences. In addition to being effective for remediating information and experiences, they also are a genre that aids in language learning and vocabulary building, which is one of many reasons why comics are a worthy genre to include in educational settings. While it is not directly relevant to my overarching discussion of composing with comics, it is important to note that a study from the University of Oregon states that "Comic books average 53.5 rare words...while children's books average 30.9, adult books average 52.7," and linguistics scholar Jun Liu explains that "…the low-level students receiving the high-level text with the comic strip scored significantly

higher than their counterparts receiving the high-level text only." Because comics can be used as a means of engaging in different literacies, especially by providing access to concepts and vocabulary that help students who may not succeed as well with traditional genres such as prose, comics are a flexible and impactful genre that can be used for many educational goals, and therefore deserve to be studied and created with as much care and rigor as traditional prose.

Comics also challenge arguments made by leading media scholars. For example, Marshall McLuhan writes in his book *The Medium is the Massage* that society is heading to an "all-at-once-ness" through a global village. He argues that due to electronic communication, time and space are no longer as distinct as they were in the print age. His argument rests on the idea that before the press, oral traditions unified people in tribal-like communities, and there was a shared sense of being that was lost in the age of literacy. Since the publication of this book in 1967, even more technology has facilitated the togetherness and unification that would support his argument that "at the high speeds of electric communication, purely visual means of apprehending the world are no longer possible; they are just too slow to be relevant or effective" (63). However, comic books as a medium can complicate McLuhan's claims by both corroborating this argument as well as contradicting it. Despite being a print medium that could theoretically be prone to fragmentation under McLuhan's claims, the aural-visual relationship in comics allows us to straddle cultures built through oral tradition and print-based societies where "seeing is believing." An easy example of this would be *Hawkeye* #19, which follows the story of the deaf protagonist, Hawkeye. In many panels, there are speech bubbles with nothing in them. At first blush, this would typically imply that there is nothing being said, but in this

instance, it shows that Hawkeye knows that people are speaking, but cannot hear and understand what is being said. However, that very example that refutes this claim similarly upholds it because comic books are *not* purely visual. Comics mediate sound, movement, and other information in a multimodal format that allows readers to amalgamate the contradicting information. Visually, it appears nothing is being said because there is nothing in the text bubble. However, when coupled with the knowledge that deaf people do not hear in the same way that hearing people do, and that this story is told from the perspective of a deaf person, they can parse together that *something* is being said, but the protagonist cannot understand what is being said. This all-at-onceness is also echoed in Nick Sousanis's work, *Unflattening,* where he explains that comics are sequential, but also meant to be viewed "allatonce."[7] He describes the sequencing of comics as "associations that stretch web-like across the page braiding fragments into a cohesive whole" (62). As comics are neither purely visual, they are also not purely fragmented. The nuance that exists in comics—and any other genre—is precisely why they must be taught in conjunction with prose and other "purely visual" media. Additionally, as McLuhan argues, the medium is the message, which means that certain ideas can only be conveyed in certain genres, and if educators *only* teach and give value to certain genres, then the *ideas* composed in those genres then risk being given more value than others simply because their *genre* has more value.

Scholars and teachers have long justified introducing comics to various curricula, citing comics' links to political themes, representations of characters and people, and their narrative

[7] Sousanis wrote it as "allatonce", and I imagine it was done to stress the together-ness of the concept.

power for autobiographical comics. Graphic novels like *Maus* and *Persepolis* were among the first comics to break through as "legitimate" literature in comparison to the brightly colored pages filled with kinetic onomatopoeia in a superhero comic. However, these two books did not make a breakthrough in the classroom because they were comics, but because the stories were impactful; and because finally there was a "legitimate" comic that mainstream academia accepted as right to be taught as one would teach prose in an English classroom, comics scholars and teachers began to use those texts as a means of smuggling other comics texts into their classes and their writing. Chris Murray writes in his book *Lessons Drawn* that "In the past, comics scholars were smugglers, sneaking bits and pieces of comics teaching into the curriculum wherever we could" (114). *Maus* and *Persepolis* became the primary gateway of comics as literature to the classroom, much as Scott McCloud's *Understanding Comics* and Will Eisner's *Comics and Sequential Art* became staples for comics theory. However, although there is an abundance of comics literature—both academic and recreational—scholars often do not have the affordance to teach beyond these texts at the secondary education and undergraduate levels. This not only creates a barrier for comics with important, relevant stories to tell, but also dissuades writers from creating within this genre. Although a story can be told in different genres, there is something particular and unique that each genre provides. There is a different flavor, a different experience, and different rhetorical situations surrounding the formation of the genre, its audience, and who creates within it, and to trivialize a genre is to rob a creator of their opportunity to create within it.

When *Maus* and *Persepolis* are taught in classrooms, I do not want the experience to end with mere content analysis of the story. I want instructors to be able to ask questions like

"What about this genre allowed Art Spiegelman and Marjane Satrapi to tell their story?" and "What things about a comic allowed you to understand the story in a way that you would not have if it were not a comic?". Furthermore, I want students to be taught about comics just as they are taught about novels and poetry so they have the tools and frames of reference to understand how comics work. Lastly, when *Maus* and *Persepolis* are taught in classrooms, I do not want them to be the lone graphic novel couple on a shelf of otherwise conventional books. I want them surrounded by a family of comics so that teachers and students are exposed to more than just autobiographical graphic novels about trauma. Including comics is also an act of linguistic justice. Scholars Neil Cohn and Frank Bramlett describe comics as a system of semiotics rather than a language. Students who struggle with language acquisition or reading for whatever reason may strengthen their relationship with language through the metaphors that comics provide in the relationship between its multiple modalities. Comics allow for a broader interpretation of meaning, and students are less constrained by the rules of language in this genre.

In the three decades following McCloud's *Understanding Comics* and his subsequent *Reinventing Comics*, comics scholars created a wealth of information to legitimize comics as a field of study. Despite that wealth, comics are still treated in practice like film and prose fiction's bastard child, only allowed to be seen in the classroom on special occasions as a (graphic) novelty[8] rather than something of intrinsic value. At this point, the state of comics studies is well past the time of justification of comics' value, and there is no better time than

[8] pun intended.

now—whenever "now" is for the instructor reading this—to enrich the classroom with comics. Hillary Chute's works, *Why Comics?* and *Graphic Women* address feminism in comics and the history of the importance of composing within the comics genre. Nick Sousanis' *Unflattening* builds on McCloud's work and tackles theories of possibility and visual meaning-making. David Seelow's *Lessons Drawn* shows a history of educators successfully integrating comics into their curriculum. José Alaniz's *Uncanny Bodies* explores representations of disability in comics and how their portrayals help and hinder perceptions of people with disabilities in the real world. At this point, the foundation for comics studies has been lying in wait for years, and what fortune we have as scholars that the foundation is strong.

The works that most closely align with what I hope to achieve by using comics to promote media literacy and expose interstices are Neil Cohn's *Visual Language of Comics* and Nick Sousanis' *Unflattening*. Cohn maps linguistic concepts to the visual aspects of comics, even breaking comic elements down into morphemes, the most basic elements of meaning-making in language. For example, "walked" would be an example of two morphemes: "walk", as a verb of someone doing the act of putting one foot in front of the other, and the "-ed" suffix shows that this happened at a specific time in the past. An example of a comic morpheme would be a speech bubble, which is a morpheme to show meaning that a character is talking, whereas a jagged speech bubble would have two morphemes showing that not only is someone talking, but they are doing so LOUDLY. Cohn's book is an important asset to comics theory because it demonstrates the complexity of comics and their similarity to how we verbally make meaning of the world around us. It opens the door for comic creators to understand the variety of elements they can manipulate. Cohn's work is the perfect anchor to integrate my theory of

interstices to comics to best understand what elements there are to manipulate and what spaces there are to fill and move around like metaphorical Tetris blocks. Meanwhile, *Unflattening* challenges notions of an "objective" point of view and critiques Western culture's reliance on text and language to communicate knowledge. His argument opens with the invisible nature of learning structures and how people are taught to replicate them, which results in their continued invisibility. However, by challenging how information is transferred and what kinds of methods are privileged, people can become aware of these structures and subsequently imagine other possibilities. Sousanis writes,

> Like a great weight descending, suffocating and ossifying, flatness permeates the landscape. This flatness is not literal … no, it cloaks its true nature under a hyper-real façade. This is a flatness of sight, a contraction of possibilities where inhabitants conform to what Marcuse called "A pattern of one-dimensional thought and behavior" lacking "a critical dimension" of potentialities to transcend their existing state. Everything has its place. Here, even choices (of which there are many), are predefined. Forgotten is the wonder of *what might be,* in its place a single chorus... this is how it is. (5-7)

Even the format of this quote does not transmit the information that Sousanis conveys in *Unflattening,* because the above quote is an amalgamation of text boxes remediated from graphic novel format to a block quote to fit the genre of my dissertation. Although some of the argument is conveyed in the text, it lacks the full argument that Sousanis makes because part of his argument relies on the visual elements of his graphic novel. Now I am put in a dilemma due to the contradicting natures of the different genres. A dissertation *does* use figures, but it is

distracting from my argument to include pages' worth of figures to quote Sousanis' argument in totality. I *could* describe the images that accompany the quote above, but it would take quite an amount of description to articulate the content of each panel, each text box, their spatial relationship to each other, and the other symbolic elements Sousanis includes in his artwork. However, the point of my argument does not rely on describing the artwork, so that amount of detail would be just as distracting as shoving pages' worth of figures here. My point here is that text-based genres have limitations, just like comics, videos, and other multimodal genres. However, text-based genres have been privileged as the main mode of instruction and information sharing, while others are less valued in many classrooms. By acknowledging these limitations and exploring how different genres operate at a structural level, people may then see the interstices that empower them to think less about how things are instead of what could be. While this chapter focuses on comics, it fits well into the larger discussion of media literacies and the necessity to teach this skill so students can better understand their experiences and others'. Anne Wysocki writes,

> Our relations with our media matter, in other words, and (this is one lesson we take from the philosophers and thinkers just mentioned) we therefore need to consider our engagements with our media if we and the people in our classes are to learn about our embodiment and so what we consider ourselves to be and to be able to do in our worlds. Those of us who teach writing need, then, to consider media that use the alphabet and to ask how such media engage with our senses and contribute to our embodiment. We need to do this both theoretically and in praxis (4).

As we can see, teaching multimodal composition and engaging in multiple literacies is a key part of engaging in anti-ableist practices. Some writers may be able to convey their thoughts in a traditional, written format, and some readers may be able to understand others' thoughts and experiences through this format. However, that is not the case for all. Because of this, it is important for people to learn the literacies to compose and understand information from a wide array of genres so people can create media in the genre that is most appropriate for their ideas.

Teaching media literacy and new media changes the pedagogical landscape of a classroom and the people who come and go through its doors. Just as I had for my interstice theory, I have a story to provide a useful metaphor for this shift of pedagogical practices. When I think about my call to action here, I think about Lake Murray in South Carolina, where my dad and stepmother currently live. Before it was Lake Murray, it was the Saluda River Valley, where multiple towns existed on the 50,000-acre land. However, in the 1920s it was turned into a reservoir, and Lake Murray evolved to become a tourist attraction. The very nature of the area changed upon the completion of the dam, and its subsequent history remains affected to this day. The towns, churches, graves, and other landmarks left below the now-flooded valley remain a curiosity no longer accessible to the average person and are only available to divers and through secondary texts. When I call for other forms of media and new ways of teaching, I do not intend to make a reservoir out of a valley, but to put these forms of media in conversation with what is already habitually taught in classrooms. I seek the solution through *orphic media*. Orphic media is coined by Mack Hagood in his book, *Hush,* and this term comes from the Greek god, Orpheus, who saved his ship's crew from the siren's song by playing his

music louder than the sirens, so the sailors were not lulled by the sirens' voices.[9] Hagood writes,

> Orpheus's sonic ability to figuratively and literally move animals, rocks, rivers, and humans with his songs speaks to the way that sound, as vibration, mediates lived space, fostering social, physical, spatial, and sensory entanglements that can vitalize bodies or threaten to shake them apart. For this reason, Orpheus personifies media's ability to pacify, fortify, and transform both spaces and the selves that inhabit them (23).

Unlike the metaphor of Lake Murray, which permanently transforms an old town into a watery graveyard for the sake of industry, orphic media layers over what is already there to transform the space for individuals. Examples of orphic media are white noise machines for people with tinnitus and headphones that can cover up the sound of people jeering at the wearer. This media does not alter the original noise, but instead transforms a hostile environment into something more palatable for the user. Hagood states, "In essence, people use orphic media to sonically remediate uninhabitable relations that emerge between...heterogenous elements" (25), meaning that orphic media, by the nature of its practice, can assist in restorative justice endeavors. Some students thrive on novel reading, research briefs, and all the text-heavy literature students read and compose. However, that is not the only genre they will encounter for consuming and producing texts, and therefore, media literacy across multiple media is both necessary and critical. It is especially important to teach media literacy skills in genres with lower barriers of entry, such as podcasts and user-created videos, which often can be created

[9] Not to be confused with Odysseus. Odysseus used wax in his crew's ears to deafen them, whereas Orpheus has a Broadway musical about him.

with free software and with minimal initial costs so that students can learn to consume and produce texts they have realistic access to, rather than primarily consuming novel-length prose that very few people produce in their lifetime.

Orphic media does not permanently erase what it covers, but it layers over what exists but does not work for the listener. While it masks uninhabitable relations for the listener, it simultaneously exposes interstices. What aspect of the text is uninhabitable? Why? Then, the solution to the problem can become a means of re-examining that aspect of the text and its corresponding genre to see if a new norm can or should be made to make it more accessible by default. Furthermore, if integration becomes the norm, it does not mean that it is used by default but that it is *available* by default. In my example video describing the relation between Thing Theory, Theory of Interstices, and Iris, I demonstrated the accessible features of *Final Fantasy XIV* that allow people with hearing disabilities to have visual cues to assist with gameplay that usually relies on sound cues. The integration of this feature does not stop people from playing without it, and the game does not have the feature enabled by default. However, it is a simple two clicks away in the game settings to be able to use this feature, and it is becoming the norm for games with large budgets to include accessibility features, which was not always the case. The inclusion of these features then transforms a game from yet another thing that a person with a disability cannot play to something that reflects that they belong in the community of people who also can and do play that game. It transforms the spaces the people who play these games inhabit, and more perspectives are put forth about the game, gameplay, and tangential experiences the players have in relation to their shared enjoyment of the game. The inclusion of one aspect of the game—accessibility settings—subsequently opens

innumerable relationships, spaces, and interstices that are forever changing because of who can interact with them.

In the next section of this chapter, I will discuss several key aspects of comics and how these elements depict sound and silence. The quasi-sonic elements can sometimes betray what readers visually perceive in the comic, which then creates a new channel of meaning-making. A comic's aural and visual elements do not *need* to be at odds with one another, but this breakage is an instance of an interstice that writers can use to convey their stories and that instructors can use to teach comics literacy. After my discussion of different elements of comics, I use *Hawkeye* #19 as an example of how these concepts are used. *Hawkeye* #19 is often referred to as "the deaf issue" because it is primarily in American Sign Language (ASL) and is told through the lens of Hawkeye, who has been recently deafened. I use this example because it both demonstrates the functions of different elements of comics composition, and it shows how comics can convey lived experiences in ways that other media could not. Although the language of this dissertation is for someone who has completed or nearly completed a college degree, the *application* of these concepts can be used for audiences as young as middle schoolers. An instructor could then signal to these concepts without naming them by asking students questions such as "How much time do you think passed in this panel? What made you come to that conclusion?", "How loudly was that person talking? What things in the panel helped you come to that conclusion?", and "How did Hawkeye listen to the people around him? How do you know that?". There is only one way I want instructors to use these ideas in the classroom, and that way is: use them in the way that best serves you and your students.

Sound, Vision, and Attention

To return to McLuhan's assertion that electronic media moves towards "togetherness," I would also like to point out that this builds on a claim he makes earlier in his book. He claims that a fragmented society that privileged isolation-imprisonment as a form of punishment stems from its origin at a time when "perspective and pictorial space was developing in our Western world. The whole concept of enclosure as a means of constraint and as a means of classifying doesn't work as well in our electronic world" (62). The easiest line here to draw could arguably be to the fragmented panel of the comic – the page itself is divided into prison cells called *panels*, and each panel is separated from one another through the space known as the *gutter.* Without the gutter, the composition of the comic page seems squished, claustrophobic, and possibly even amateur. However, too much space in the gutter gives the impression of a great deal of time or space passing between panel one and panel two. At first, it could seem that the panel imprisons a story in a similar way to the punishment through isolation given by literate societies, but comics scholar Neil Cohn describes panels not as isolated fragments of the story, but as *attention units.* Within each of these units stand morphemes as well as gestural, temporal, and spatial elements that exist in oral communication and tell stories differently than text-based media. Consider the frame below from Scott McCloud's book *Understanding Comics*:

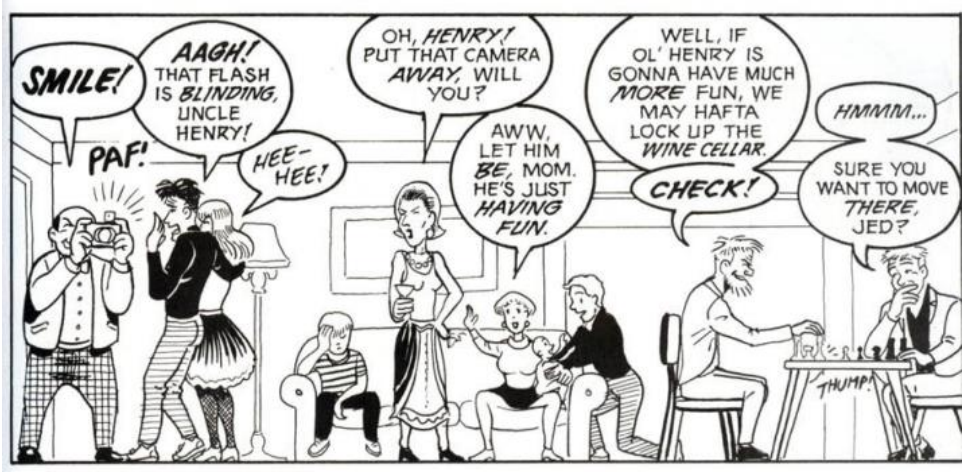


Figure 1: *Understanding Comics,* Scott McCloud, pg. 95

There are those who liken comics to films because comic panels provide snapshots like frames in a film. These snapshots are isolated moments in a larger scene. However, this panel (and many panels) contradict that notion and complicates the relation of the isolation of a panel to a prison. Even a film with the lowest frame rate will have each frame capture a single moment and only that moment. The comic panel, however, can have a duration of an instant to something much longer, and that duration is, in part, determined by speech and sound. The panel above cannot ever be contained in a single film frame because it contains three groups of conversation, all of which respond to the others, and have multiple responses within each conversation group. "Seeing is believing" works less here because the "imprisonment" of the panel may trick us initially into believing that this is a singular moment until our aural/oral minds reinforce that this is, in fact, a longer moment rife with human relationships. McCloud then presents the same panel, now with time in the balloons instead of text, to draw attention to how time passes throughout the single panel according to how much time *most likely* passed during each character's response.

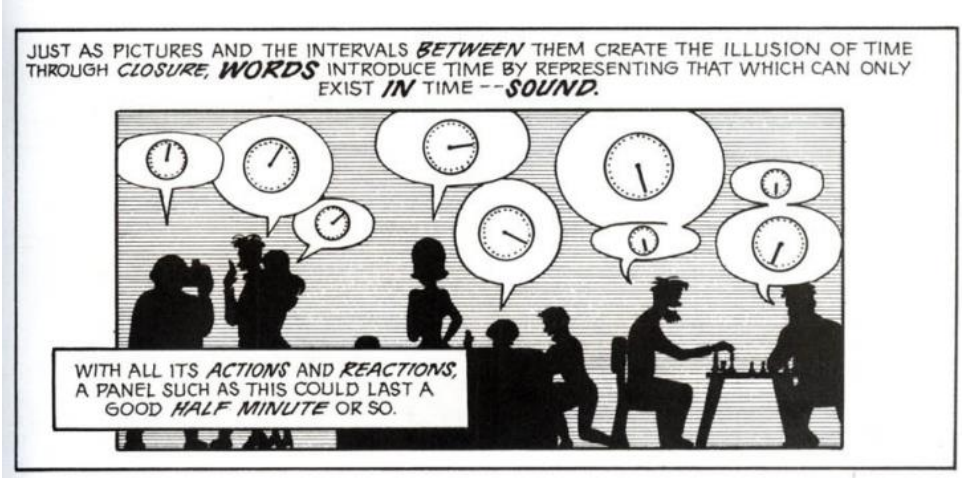


Figure 2: *Understanding Comics,* Scott McCloud, pg. 95

McCloud states "A silent panel ... could indeed be said to depict a single moment ... if sound is introduced, this ceases to be true" (98). Comics, although print-based, still contain quasi-sonic elements. As we can see here, this singular example can trouble the argument that print isolates rather than unifies, because the temporal and spatial understanding of the comic panel draws from the experience of *togetherness* – of existing in a space where people respond to each other and talk with one another. It relates to existing in an aural environment, and to interacting orally with other people. When interacting with this panel in this medium, the reader must draw not just on their verbal literacies, but also their experiences as a member of their communities.

Affective Sound

Several comics scholars quote Sara Ahmad in discussing the "stickiness" of a disability. However, very little is said about the context in which Ahmad created this term. It comes from her 2004 book, *The Cultural Politics of Emotion,* to describe the affective quality of emotions. She says that "emotions are ‘sticky’, and even when we challenge our investments, we might

get stuck. There is hope, of course, as things can get unstuck" (16). In this way, she describes how certain emotions and metonymic relationships are formed in ways that are often problematic, and therefore, we are meant to consider stickiness in terms of how we can "unstick" these relationships. However, comic scholars use stickiness in discussing how visible disabilities are stickier than those that are invisible, arguing that we must consider stickiness in terms of how we can continue to associate the disability with the character not to erase that representation. It is interesting how the term is borrowed and transformed within the comics studies discipline, but it does bring me to discuss how we can use affect theory to understand representations of sound in the mute medium of comics.

While comics traditionally do not aurally make sound, sound is everywhere in comics. It is in the onomatopoeia of every BAM, WHAM, and POW. It is in every speech bubble, every panel, and it is interpreted in every reader's mind. Sound also exists in the panels that are "silent", where there is no text and even no images. The silence in these black, barren, or wordless panels provides a break between comic noise and makes sound even more prominent when it is represented in comics. Jonathan Sterne in *The Audible Past* says that "[d]eafness was at the very beginning of sound reproduction" (41) because sound engineers studied deafness to understand how we can reproduce sound. Sterne explains that early sound technicians treated sound reproduction as "a problem of reproducing effects, rather than reconstructing causes" (48). Comics primarily work in the opposite manner – they reproduce causes of sounds rather than attempting to construct effects. We do not hear characters talk, but we know that they are talking because of the iconic and symbolic elements that readers are trained to understand as quasi-sonic elements in comics.

However, comics can also visually reproduce the effects of sound. For example, Damian and Adrian Wassel's *The Gifted* is a story about a wolf scavenging for food. In the story, it encounters humans, and the speech bubbles show words in the phonetic alphabet, meaning the wolf can hear the physical sounds that are being produced, but it doesn't understand the meaning of them. The choice of the phonetic alphabet positions the reader to "hear" [process, imagine] sounds instead of words and, therefore, is focused on the effects of this reproduced sound in a way that *Hawkeye* #19 does not attempt. However, both choices place the reader in a position to have to do more work to understand the meaning of the symbols and icons on the page – either by translating the phonetic symbols to English words or translating the American Sign Language (ASL) icons to English. *Hawkeye* artist David Aja tweeted in defense of their choice not to translate the ASL because they intended to frustrate hearing people so that they would be more sympathetic to the frustration that deaf/Deaf[10] people experience when they are not included in an accessible conversation. Here, we can refer back to "stickiness" in terms of using affective emotion to ensure the stickiness of a character's invisible disability.

***Hawkeye* #19**

Clint Barton, a.k.a. Hawkeye, was first introduced in 1964 as a non-superpowered human with incredible ability using a bow and arrow. He became deaf in the 1980s when he sacrificed his hearing while setting off a sonic arrow bomb to stop the villain, Crossfire. In the two decades that Hawkeye was deaf, his disability was rarely acknowledged, partially because the character canonically did not want people to know he was deaf, and because writers claimed that the

[10] Deaf with a capitalized "D" means that the person was born deaf, whereas deaf with a lowercase d indicates that the individual became deaf later in life.

arch-inventor, Tony Stark, was able to make hearing aids that were "practically invisible." While earlier writers cured his disability through retcon, Matt Fraction created a new retcon to bring back Barton's deafness, and he challenged the previous iterations of *Hawkeye* by having Clint be open about his deafness instead of hiding it. A retcon is a term used in fictional work when previously established events are rewritten and now reflect a new interpretation of the event(s). In Fraction's *Hawkeye*, Clint Barton (Hawkeye) suffered physical abuse as a child, which left him hard of hearing, and he became entirely deaf as an adult after an injury. In the nineteenth issue of the series, the reader experiences much of the issue through Clint's perspective. Casey Ratto writes about disability in comic books using Ahmed's concept of 'stickiness' to describe how difficult or easy it is to remove a disability from a character. She writes, "the stickiness of disability in superhero comic books is dependent on visible signs of disability and those without a visible sign are either 'cured' of the disability or it is erased via a retcon." Ratto later writes "In retconning Hawkeye's origin story to include his deafness instead of making it a random plot point, both Fraction and Aja shift away from the medical construction of disability and towards the social construction of disability." This is a point that is confirmed by other scholars such as Jay Dolmage (*Accessible Articulations)*, Naja Later (*The Deaf Issue),* and David Lewis (*Seeing Sounds/Hearing Pictures*).

The comic uses the formal elements of comics to represent the existence of sound even when the protagonist cannot perceive it. Below, we can see that Clint can understand the qualities of the speech-sound in terms of the volume of the voice but is not able to understand what is being said. This is shown through the outline of a speech bubble. Cohn lists speech bubbles as an example of a comic morpheme. However, although Cohn describes speech

bubbles acting as a basic unit of meaning for comics, speech bubbles are not a singular morpheme because they still consist of smaller elements that produce meaning, such as their size in relation to the text, their outline, and their color. All these smaller elements can build to the larger meaning of the qualities of the person's voice, as is demonstrated with the "indoor voice" speech bubbles and the "shouting" speech bubble. In the following example, we can see a moment where the comic both is functioning and ceases to function: although there is no text that carries discernable information for the reader, we still understand a difference between the voices in the two separate panels because the outlines indicate a speaking versus a shouting voice.

Figure 3. *Hawkeye* #19, Matt Fraction, pg. 2

Figure 4. *Hawkeye* #19, Matt Fraction, pg. 7

Meanwhile, in the series of panels below, the reader can see a young Clint Barton sitting in the doctor's office as the doctor discusses something with his parents. Here, we see scribbles in the speech balloons, meaning that Clint can partially hear, but not well enough to understand what the doctor and his parents are saying. Therefore, the reader can know that the younger Clint Barton was partially deaf, and then he became fully deaf as an adult and, therefore, the comic still functions as a comic even when the fundamental element of text in speech bubbles is stripped away.

Figure 5. *Hawkeye* #19, Matt Fraction, pg. 1

The artist draws the tension between sound and vision, breaking the gaze of the young Clint's eyes into four separate panels instead of one, elongating the time of the stare. This is not just *one* moment, but a bullet-time depiction of his frustration, isolation, and realization that he is still *him,* but the world is no longer made for him. Clint remains silent throughout this scene, but the artist communicates Clint's feelings across these four panels, using the compositional choice of separating them instead of using a singular panel to voice Clint's fragmented emotions.

Later, the comic visualizes how the character processes what is said differently than how it would be heard, and continues to use panel composition to convey deeper meaning. On the tenth page of the issue, Clint begins lip reading, and the text is shown as wobbly with '*something*'s mixed in as Clint misses words that are clearly said, but not clearly perceived.

Figure 6, *Hawkeye* #19, Matt Fraction, page 10

In the above image, Clint's brother, Barney, tries to break Clint's silence by saying that he's deaf, not mute. The visual elements in the speech bubble in the first panel inaccurately suggest that the speech is stunted, disjointed, and inarticulate. However, when combined with the body language in the second panel, the reader is then able to infer that the speech was said firmly, but the perceiver of the communication (Clint) has difficulty understanding what is said. Contrary to what McLuhan expects out of visual and print media, seeing is not believing in this case. Instead, *Hawkeye* #19 positions the reader to have to consider multiple literacies through visual and aural practices, and it shows the aural qualities of a comic book as well as the oral interpretations of different experiences in multiple ways. For Barney, he spoke firmly and with authority. For Clint, Barney spoke too swiftly for him to understand each individual word but was able to parse together the conversation to communicate with his brother. Additionally,

these two panels draw attention to temporal and spatial elements. First, the first panel in the figure is a close-up of Barney's lips - because Clint is lip reading, this feature is put on high focus, but it is unclear what the time relationship is. McCloud's example of speech and sound acting as a determiner of time is helpful in the sense that when we know what is being said and can infer the tone and pacing by the speech bubble shape, font size, font type, and character body language, we can infer how much time has passed. However, this panel is left ambiguous - we cannot read Barney's body language in this panel, the shape of the bubble betrays the qualities of Barney's voice, and what Clint/the reader perceives does not match what is being said. Furthermore, the second panel of the sequence is left without a border, suggesting an "open" interpretation of how long this moment lasts. At what point did Barney grab Clint's shirt? How long do they remain in that position before time progresses to the next panel?

Another way *Hawkeye* #19 complicates McLuhan's *seeing is believing* argument is through Clint's interpretation of sign language. Throughout the comic, Fraction includes panels of sign language, but it is not always clear whether people are signing or that people are talking, and Clint is interpreting the speech mentally into sign language. There are panels in the comic that show the characters physically signing, but there are also moments when the characters are replaced by icons. For example, the figure below shows a conversation between Barney and Clint.

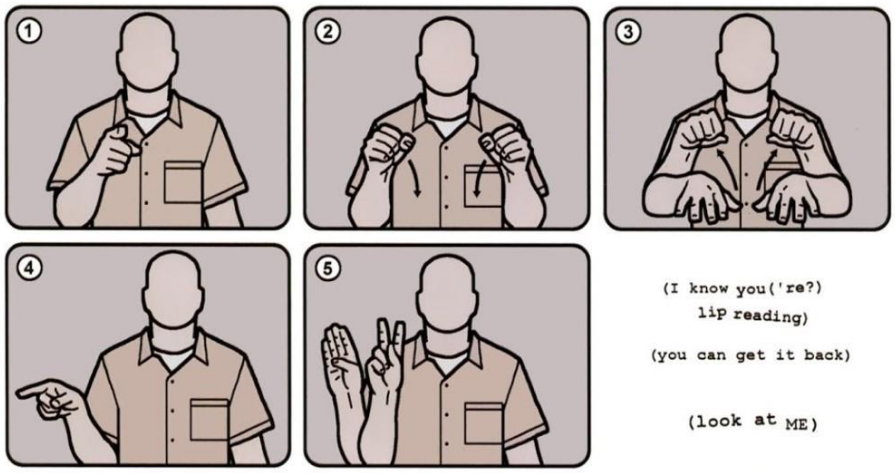


Figure 7. *Hawkeye #*19*,* Matt Fraction, pg. 15

In this sequence, the reader must interpret the conversation through sign language, and may have assumed that the conversation is happening through sign, until the final panel that shows Barney acknowledging that Clint is lip reading. The reader's visual input is once again called into question – was Barney speaking or signing? Was he signing up until the last panel? Depending on the answers to these questions, we are then called to question the temporality of each panel. The time it would take to sign a certain word does not always respond to the time it would take to dictate the same word orally. The panels are also numbered in sequence as one would interpret sign language, but the syntax of spoken language also differs from the syntax of signed language. Therefore, the temporality is changed both in terms of time taken as well as the chronological order of these words and how they're interpreted. This sequence complicates kneejerk assumptions of an unreliable narrator as well since it is not Clint retelling the story in an unreliable manner, but the viewer witnessing the remediation of Barney's communication in Clint's mind as Clint translates the information that he is taking in. In a time where misinformation and disinformation run rampant and demagogues attempt to simplify complex issues into "clearly right" and "clearly wrong," instructors can point to compositional devices

such as the above example. The reader sees accurate information, but not in its original mediation—and questioning how witnessing the *re*mediation versus the original they will never get to see affects their understanding of the issue is an important tool to challenge external pressures begging for oversimplification.

Regarding Staring and Icons

In a 1979 interview conducted by Dennis O'Neill, novelist Samuel R. Delany says that "[v]iewers can control the speed their gazes travel through the [comic] medium, they can control how far away or close they hold the page, whether they go backwards and regaze—and going back in a comic book is a very different process from going back in a novel to reread a previous paragraph or chapter" (40). Comic readers can stare at and consume the images on the page as closely and for as long as they want. Daniel Preston argues in "Crippling the Bat: Troubling Images of Batman" that because the panel can be stared at for any length of time, the panel serves as a freak show where the character is displayed for the reader's consumption (213). The character serves as an object of information for the reader to stare at for their own knowledge gain. Preston argues that it is often in comics that the panel serves as a means of putting the character's disability under a microscope to showcase body horror or to invoke pity on the fallen superhero. *Hawkeye* #19 removes the character and replaces them with iconography, which eliminates the readers' ability to gather information on the *character* and, instead, must gather information on the meaning from the signed language. *Hawkeye* #19 manages to affirm an invisible disability while simultaneously removing the character from the microscope.

The choice of using an icon instead of a character functions as a universalizing tool as well. Scott McCloud explains in *Understanding Comics* that the cartoon icon allows the reader to forgo realism and focus on a separate idea: meaning. He says that "when we abstract an image through cartooning, we're not so much eliminating details as we are focusing on specific details by stripping down an image to its essential meaning" (30). The iconography of the sign language in *Hawkeye* #19 draws the reader to understand the language that is conveyed instead of the disabled-ness of the character. The reader is not tricked into forgetting Clint's deafness, but instead, they are immersed in it and guided to focus on the specific detail of making meaning as they are visually deafened by the comic. McCloud then goes on to explain that "the more cartoony a face is … the more people it could be said to describe" (31). By depicting the unrealistic icon as opposed to a more realistic drawing of the characters, Fraction and Aja universalize deafness. This is not meant to represent only the characters in the comic, but anyone who would have to communicate when someone cannot hear. One drawback to this version of iconography is that expression plays a large role in American Sign Language (ASL), and therefore, the faceless icon in the comic would not be able to represent the full scope of the language. Expression in ASL is categorized as "non-manual signals" (NMS) and can give the "tone of voice" intended while signing all the way to changing the meaning of the sign.

The Social Construction of Deafness

Figure 8. *Hawkeye* #19, Matt Fraction, pg. 17

Earlier in this chapter, I explained how multiple scholars affirm that *Hawkeye* #19 focuses on demonstrating the social model of disability. What this means is that a disability is socially constructed by architectures and attitudes that make places and other things inaccessible. This is modeled in part by Fraction and Aja's making speech bubbles unreadable to disable their reader. Dolmage writes that this decision was "*meant* for the reader to experience the inconvenience of an inaccessible world" (364) and to highlight "the realization of human interdependence" (365). *Hawkeye* #19 demonstrates this dependence in the latter half of the comic, where the people around Hawkeye support him and learn to communicate with him rather than finding measures where the burden is on Hawkeye to integrate back with the hearing world. The comic demonstrates three elements of telling deaf and disabled narratives

that can operate as a means of erasing barriers of access in fiction: The messiness of becoming, reclaiming agency, and normalization.

Element One: The Messiness of Becoming

Clint is not fluent in sign language, nor does he have a complete grasp on lipreading, and the reader is placed in Clint's perspective as he struggles to make sense of the aural world around him. Deaf scholar Naja Later explains how comics traditionally are accessible to people with hearing loss because the words, sounds, and other noises are all illustrated. Furthermore, Clint isolates himself in the comic upon becoming deaf as he comes to terms with his disability. The portrayal of a character with disabilities during their time of 'becoming' or while they are still "making do" is an important, rhetorical choice so that readers can understand that having a disability is an altering experience that requires time to adjust both emotionally and practically. When Hawkeye canonically first became deaf in the 1980s, writers sanitized his disability by having him request a 'practically invisible' hearing aid from technology genius Tony Stark. This immediate near-retcon of his deafness resulted in readers not seeing the immediate changes that occur on several fronts – functionally, emotionally, and physically – when one must adjust to the loss of one of their senses. Fraction and Aja's *Hawkeye* #19 combats this shortcoming by showing Clint practicing how to sign and lipread throughout the issue rather than skipping straight to a point where he is comfortable with his disability and knows how to skillfully navigate a world made for hearing people.

Element Two: Reclaiming Agency

The comic issue begins with Clint losing his hearing as the result of abuse and from an accident while fighting villains. Both events were beyond his control, and during both times of hearing loss, Clint was positioned in the comic where he was not able to enter the conversation regarding his own deafness. The panels show Clint with a mixture of shame, sadness, and anger, but the comic does not leave Clint at that. Instead, it shows his process of reclaiming his agency from having other label his disability to communicate his disability and his needs himself. Figure 8 shows Clint addressing his neighbors by explaining that he is deaf, he is going to practice sign language by signing to them, and his brother will translate so they understand. Furthermore, Clint does not have to abandon his role as a superhero because of his disability. By the end of the issue, the neighbors and Clint devise a plan together on how to stop the villain from achieving their goal, and Clint's deafness is not labeled as a debilitating factor. Instead, it is a new development of his character that he is learning to navigate.

Element Three: Normalization

It is a crucial decision that *Hawkeye* #19 demonstrates hearing people learning how to communicate with their deaf neighbor, Clint. This choice led to his hearing neighbors learning the signed word, 'We.' This moment in the comic positions Clint amongst others as they learn how he communicates instead of forcing him to exclusively to adjust in order to communicate. By normalizing the use of ASL among people who can hear, the comic models that it is the responsibility of able-bodied people to also try to learn how to communicate with those who are deaf or need other methods of communicating besides spoken word.

Figure 9. *Hawkeye* #19, Matt Fraction, pg. 19

Fraction and Aja's *Hawkeye* had a lasting impact on Clint Barton as a character. Subsequent writers made Hawkeye's deafness explicit, thus giving more legitimacy to the canon of Clint now being deaf. In the 2015 *Hawkeye vs. Deadpool,* Clint has several conversations about his deafness or by communicating in sign language. Deadpool also spends most of the issue with his facemask up so Hawkeye can read his lips. In *Comic Book Fandom and Cultural Capitol*, Jeffery Brown explains that fan cultural capital exists on the collection and knowledge of 'canonical texts' either 'by plot or creator significance.' He also explains that a large part of fan culture is the creation of text and art featuring pre-existing characters. Through the continued acknowledgement of Fraction's run of *Hawkeye* by other Marvel writers, the fan-made texts also gain legitimacy by featuring a canonical version of Hawkeye instead of something that is deemed a 'one-off' run or a fan-made fantasy.

So, why do these three elements matter? Much as I loathe to divorce practice and theory, formal analysis should never be entirely separated from content analysis. Sousanis writes,

> When we take the all-over composition into account, form and expression become one. Meaning is thus conveyed not only by what's depicted, but through structure: the size, shape, placement, and relationship of components – what they're next to and what they're not, matters (66).

If we are to teach about media interstices and the potential they provide, then we must also advocate for filling these spaces with content that empowers rather than disenfranchises. We must also acknowledge that the formal elements and compositional choices affect meaning, and how the content is conveyed and understood by its readers. Furthermore, the classroom space affords instructors the benefit of having, on average, at least two dozen minds at work. Creating a low-stakes way for students to engage with these concepts, compose, and then observe how two dozen minds used the same interstices differently provides students with more insight into the vast possibilities of media creation as well as openings to challenge their biases in general. For example, a class may be asked to focus on composing a one-page comic with the goal of using explicit attention to panel composition to bring awareness to a specific issue. The assignment focuses on both practicing formal techniques (panel composition) with content study (their issue). When students finish the project and then showcase their work for the entire class to observe, the class may then witness new perspectives from issues they may or may not have been aware of, and they also observe how other students used panel composition differently to achieve the goals of the prompt.

However, such a project would not be possible without a model. *Hawkeye* #19 provides such a model, although it is not the only comic that could be used. Alternatively, students could be assigned a media *dérive* to explore the interstices' potential and then compose a piece after their mental sojourn. The *dérive* was popularized by Guy Debord in the Situationalist International movement to bring awareness to the psychogeography surrounding urban inhabitants and to explore environments beyond what is immediately presented. I have used elements of the *dérive* in activities of mine. One of the most notable is the combination of the *dérive* with Steph Ceraso's Sound Walks. Ceraso asks her students to walk their campus and rhetorically listen to the sounds around them, attend to them, and document them so they can later analyze the rhetorical natures of those sounds. For example, if they hear a specific bird chirping, what circumstances allowed that bird to be on campus? Did the campus plant the tree the bird lived in? Is the spot on campus only accessible to students, and the bird was only audible because there wasn't high foot traffic? When teaching rhetoric, I am often met with looks of disbelief when I tell students that buildings are rhetorical. I can lecture until I am blue in the face, but experience teaches better than I ever could, and my students are intelligent enough to come to their own conclusions. So, I ask them to wander campus in the style of a *dérive* and give their attention to the architectures around them. I give a list of specific things to observe, such as which spaces encourage them to enter, sit, and mingle, as well as note what about those spaces encourage them to do those things. Students are also encouraged to note anything else they observe, and at the end of the activity, the students understand that buildings are rhetorical based on their observations and not because I told them so.

Similarly, students can be encouraged to explore a genre such as comics and take a *dérive* through the genre and explore its formal elements and seek interstices that they could use to tell stories and remediate information. An activity like this encourages students to challenge the "seen but unseen," the "there, but taken for granted," and the "it is what it is" and work with, around, and against it. James Carse writes that "What will undo any boundary is the awareness that it is our vision, and not what we are viewing, that is limited," so it is imperative for students to seek and be guided to seek new ways of understanding the information they encounter and the ways that information is created and circulated by themselves and others. Similarly, if a student wants to normalize or tell a story that others may not understand—like the case of the deaf character Hawkeye—it is not deafness that is the hindrance, but the way that others view deafness. Therefore, to undo the boundary, instructors should encourage a combination of encouraging students to approach media forms from a stance of openness to practice new ways of looking at the information and seeking how they can compose information within the genre to accommodate those who have not had the opportunity or desire to seek new perspectives.

Concluding Thoughts

So, what does that leave us with? McLuhan argues that visual isolates while aural unifies, but comics provide a sticky riposte to that line of inquiry. Some scholars, such as Cohn, have tried to isolate elements of a comic to justify how these elements act, but even that approach is flawed and can be broken down into smaller elements. We could turn to Thing Theory where a thing's "thingness" comes from its (dis)function - so does *Hawkeye* #19 fit in this description because it no longer "functions" as a traditional comic that a reader can easily sift through? Or does it

continue to function because it still uses the elements of a comic through different means? Rather than dwell on the prescriptive features of a thing, I think it would be more fruitful to consider a comic's *thingness* not in what it is or what it does, but in what its relation is to others. Comics have elements that are overflowing but often overlooked, such as sound, since many people are not asked or encouraged to analyze media formally and, instead, focus on content. Furthermore, many comics scholars even overlook the aural elements of comics since the hybrid medium is so vast and rich with interconnectivity, it is difficult to talk about *everything,* and at the same time, it is difficult to talk about *one* thing because of its relation to the other elements of the medium. When we consider comics as a surplus and as its relation to itself and to its reader, we can better understand how rich comics are in possibilities, interstices, and pathways to understanding the world around us.

The representation of sound in comics is a well-worth endeavor to explore, especially in terms of accessibility and the representation of deaf/Deaf people. *Hawkeye* #19 provides us with a template of how we can use the form of comics to visualize sound and certain disabilities, and it is one of the few mainstream comics that explicitly represents a character with disabilities. There are many autobiographical comics available in terms of representations of disabilities, such as *Stitches, El Deafo, Something Terrible, Hyperbole and a Half,* and *My Degeneration,* so there is a wide array of examples we could pull from to understand how comics provide access to different voices and how those voices are visually represented. In the wake of a long history of troubling images and representations of minority groups in comics, scholars have provided ample and necessary criticism on how comics have failed. However, I posit that it is now time to focus on the comics that model a shift in equitable representation

and *Hawkeye* #19 is an example that provides us with signs of change. Sound and formal analysis are not the only ways in which instructors may encourage media literacy and equity in their classrooms. Much like how I cobbled together aspects from other instructors into my own practice, I would expect other instructors to extract ideas from this dissertation and merge them with other ideas from other instructors and scholars. The limit of our frames of references, perspectives, and experiences as individuals serves as an affordance and impetus to seek more. We are limited, and therefore we have the privilege of seeking others' perspectives, so we are given a social learning experience instead of an isolated one. Similarly, we are limited and liberated by our brains due to the need to organize information for recall. In order to understand the sheer amount of information and human experience around us, we categorize. We break things down into simplified versions and box them up into neat categories, but we also possess the ability to evaluate the structures and invisible systems that guide us into creating these shortcuts. Sousanis writes,

> Through our everyday perceptual and bodily activities, we form dynamic image-like structures that enable us to organize and make sense of our experience. Happy is up. Sad is down. These structures operate below our conscious awareness and shape our thinking and behavior. Concrete experiences serve as the primary building blocks from which we extend our capacity for thought and give rise to more abstract concepts. We understand the new in terms of the known (75).

Although it is a limit of our brains to need to organize information into categories, the cognitive ability to understand *why* we organized it in such a way once the subconscious decision-making is brought to our attention is a strength. In fact, it is one of the assets instructors can ask their

students to use when making media, when challenging information, and when remediating information so they may contribute to an environment that encourages the expression and normalization of many perspectives instead of a singular norm.

INTERLUDE I – Comics

While I was in a meeting with Marc Tasman, the Digital Arts and Culture Director at the University of Wisconsin – Milwaukee, we discussed ways to connect undergraduate students to the community. In that meeting, he asked if I knew what interstices were, not knowing I had written over a hundred pages on the matter in the year leading up to that meeting. In my excitement, I hastily gave an overview of how I use interstices in my dissertation and labeled them as empty spaces. Although that is part of my theory, it is not the *entirety* of what interstices mean here, and the director was quick to give his own example, which provided the nuance my hasty explanation lacked. He said that interstices didn't need to be empty and were often already full. However, they could still be filled even more. He gave the example of bugs making homes in the mortar of buildings, and that they are often overlooked unless people take the time to see them. Although Marc used this metaphor to describe how we can make connections for undergraduates that are already there but overlooked, it provided me the connecting thread I needed—the metaphorical mortar between the building blocks of ideas—to write this interlude chapter.[11]

Towards the end of the semester, I assigned a 17-page excerpt of *Hawkeye* #19 to my class so the students could analyze elements of the comics genre, see how a genre represents people with experiences other than their own, and find inspiration for their final project. Although the *Hawkeye* text can be used for a series of activities regarding genre analysis and

[11] Not only am I grateful to Marc for his insight on non-emptiness of interstices, but because he let me know how interstices are pronounced. Until that point, I'd only ever read and written the word, and it would have been quite embarrassing in my defense to pronounce the main idea of my dissertation incorrectly.

composition literacies that could last the entire class period, this text was used as a surface-level focus point before having students brainstorm their own projects. The time spent discussing *Hawkeye* took no more than 20-30 minutes, and then we transitioned to workshopping their final projects, which is a public-facing document made from their research about a specific topic or issue in their local community. After they read the excerpt, I gave the students the following questions to answer in class:

1. Do you define yourself as someone who reads comics?

2. Before reading Hawkeye, how did you think sound worked in comics?

3. How was Hawkeye composed like a "normal" comic? How was it different than you expected?

4. What did you learn about sound in comics from reading Hawkeye?

5. What did you learn about people who are deaf from reading Hawkeye?

6. Discuss how analyzing parts of the genre (comics) and finding ways a genre can "break the rules" helps you with creating your final project.

The questions are meant to be low stakes enough that they do not have jargon that stresses students to respond formally but instead write down their initial thoughts and consider their own position and assumptions in relation to comics. Most of my students identified themselves as people who read comics in the past, yet do not consider themselves "comic readers." However, all of them were able to engage in the analysis despite their lack of expertise. After students write down these answers, I have them partner in groups of two or three to discuss

each other's answers before we reconvene in a large group and have a class-wide discussion over the main themes they found in their answers.

Although the activity was brief, the students were able to work through concepts of media literacies. Most of the students answered that they either didn't think about sound in comics, or that sounds were expressed through onomatopoeia, such as "pow!" and "bang!". Some observed that text and font color were ways that comics used to depict the qualities of sound. However, when asked to describe how sound works in comics after reading *Hawkeye,* the examples students gave were more diverse and included more nuance. For example, one student wrote,

> **Perri** - In the first 10 pages' sound was defined visually by the character's conversation bubbles. It would be circular or oval for normal conversation but circular and rigged or pointed for like anger or expletives. Also the way the images where [sic] drawn helped the perception of the sound from the car to the sidewalk to the fight and kicks somewhere narrow images others where [sic] very wide. Also some of the sections visually showed the sign language being "Spoken out" in form.

Perri's response shows more than just sound through onomatopoeia. He lists the qualities of the speech bubbles and how people can infer ambient soundscapes based on the environment drawn on the panel or the movement indicated through motion lines and reader imagination. Perri's allusion to panel size and inferred sound shows advanced genre awareness since the ambient sound imagined from a small, narrow panel captures a shorter amount of sound versus a longer, more drawn-out soundscape on a full-page panel. The analysis Perri provides shows a

deep understanding of the comics genre, and the low-stakes and colloquial nature of this activity allowed students to wrestle with high-level concepts in an approachable manner and demonstrate their skills in genre analysis without the pressure of speaking in an academic register. This would later provide an opportunity for me to refer to their insight and point to the skills they clearly have and use this as a foundation when they must perform analysis in an academic register.

One student noted cultural differences as someone who primarily reads Japanese comics called *manga,* which use an asterisk and a translation of the sound from Japanese to English at the side of the panel, but the sound effect is left in the original Japanese characters. This is a common practice in many fan-translated manga available online since this work is done for free or for little pay, and changing the onomatopoeia art from Japanese to English would be time-consuming. However, the observation that several students made that proved most useful for our discussion of *Hawkeye* was their "inner voice" that imagined the sound. One student wrote, "Well I thought that the sounds really come down to what you hear in your mind or how you see it if that makes sense," which provided the student-led segue into how *Hawkeye* "broke the rules" without completely *breaking the rules.*

The deeper observations my students made broke away from merely analyzing the elements of the genre and considering intended audiences while composing media. Although the course covers the rhetorical situation, and I teach the students that when they write, they must have an intended stakeholder and audience in mind, I did not mention audience in this assignment, nor did I ask students to reflect on that. Despite this, almost a third of my students

explicitly referred to intended audiences during their analysis of "genre rule breaking," showing a mastery of rhetorical awareness in their short writing responses. Here are several excerpts:

> **John**- Analyzing comics for genre can help me in my segment three project because the rules for genre are somewhat relative. Even though the genre of a comic book is meant to have pictures, dialogue and descriptions of sounds with words, the rules can be bent so that more of an audience can access their discourse.
>
> **Elias**- This analysis helps with this project by focusing on how to bring the most impact of the message you are trying to portray to better speak to your audience.
>
> **Beth**- Overall, discovering ways that a certain piece of work breaks boundaries within its own grouping is useful in understanding how you can emulate similar breaking of boundaries, but in your own fashion. Simply put, the possibilities are endless and being aware of different techniques others may use to convey certain massages [sic] may assist in finding different, and more effective, ways to reach an audience.
>
> **Keagan**- Hawkeye reminded me that sound is subjective, and that comics/information can be displayed in all different forms. I think it's really cool to have diverse comics with specific audiences because it allows for new and different characters, as well as representation for more people. This helps me think outside the box because I would have literally never thought of doing something like this
>
> **Hayden**- learning how this comic was made and who it was made for showed me that the different forms of genre can be tailored into any form that you need them to be in for your audience and not just the plain original version of them for everybody.

Not only were the students demonstrating their growing literacies around genre and larger contexts around composed media, but they showed their awareness of how genres can be bent to accommodate audiences and people with specific experiences rather than bending rules for the sake of bending rules. The reflections above show their understanding of the research, thought, and choice that goes into a single aspect of a genre and how that subsequently affects how effective it is, and which audiences it is intended for. In turn, many admitted to seeing the innovative risks taken in *Hawkeye* and decided to challenge themselves in their own projects—Some admitted to wanting to try composing in genres that they were hesitant to attempt, while others reflected on different ways a genre can be adapted to convey important information.

> **Emily**- This can help me because it shows that you can take one aspect of a genre and kind of flip it on its head. For example, a Ted Talk could instead of having the person there standing and talking, it could be an animated video showing examples of the things it is explaining. Analyzing other genres can allow you to understand what makes those genres work (visual designs) and turning into what one would think wouldn't work (lack of audio).
>
> **Becca** - Reading Hawkeye, I learned that sound or lack thereof can convey messages of its own. To illustrate, the deaf man's perspective shows only empty text boxes, but in different shapes. The lack of any sound almost creates a sense of isolation, and the various shapes depict the tone of the individual talking based off of facial expressions and etc. Furthermore, I gathered from the reading that deaf individuals may often feel misunderstood due to the language barrier that might exist between themselves and

others. While I feel as though this is a much deeper issue, the comic touches on it nicely.

Lukas- I think that the way this comic was stylized goes to show you that you can make something relatively unorthodox and still have it do well if you are creative and smart enough.

James- Analyzing the comic will help me greatly with my final project. After seeing the out of the box writing and creating found within Hawkeye, I have decided to challenge myself and make a podcast.

To conclude my thoughts on the student responses, this activity did not necessarily teach them anything new. However, it connected untethered blips of knowledge to concrete ideas and ways for these thoughts to matter. Before they had the example of using comics to show a deaf man's experience, there was not as much significance to why it matters to know how sound works in comics. Furthermore, it grounded the idea that they do not have to be experts in their genre to understand how to be effective in composing within the genre and seek out interstices that can be manipulated, though they *do* need to reflect on what they need to do within their genre to be effective in reaching their intended audience(s).

Although I did not mention interstices or thing theory by name, the students still engaged with the concepts provided by these two theories. For example, Emily, Becca, James, and Lukas identified that there are creative and intelligent ways to push boundaries, which can guide them toward more targeted ways of expressing their ideas within a genre instead of an abstract and haphazard impulse to break the rules of a genre for the sake of doing something

different. Instead, they were given an example that pushed boundaries rhetorically for a specific audience and purpose. The composer deeply understood the regularized aesthetics of the genre, as well as the function of the genre's individual elements, and subverted the aesthetics of the elements but not the functions. Meanwhile, Beth took note of the surplus of ways to compose within a genre and the "endless" possibilities for being effective communicators to an audience. Through their reflections, the students demonstrated that they are developing a more nuanced understanding of genre and, instead of seeing them as finite objects they interact with, see genres as Galloway and Wark see Iris.

MOVEMENT II - It's No Game: The Nonhuman, Human Voice in Video Games

The relationship between video games and sound has been shaped by technological limitations as much as it by the conventions of the genre. This limitation yielded tactical responses from game designers to use what was in their technological and monetary means to include sound and voice, even if these sounds do not realistically replicate the outside-of-game sounds they represent (Summers 2016). Every video game can present the player with its own set of rules, physics, norms, and reality. How a player is meant to interpret sound is included in this rewriting of reality. Therefore, if a character's text bubble is accompanied by crunching noises rather than the sound of a traditional, humanoid voice, it is meant to be taken as normal in the game world.[12] Similar trends can be seen in other media with emergent technologies such as film, webpage design, etc., where creators experimented during the genre's nascent stages and had to make do with what was available at the time. These decisions influenced the development of these genres to fit the growing needs of their audience as well as to bridge the technological gap between what was possible within the genre and what needed to be possible in the genre. In the case of video games, sound is a necessary device not just for recreating realities and facilitating the suspension of disbelief but also for confirming player action. Early video games were limited to single-bit sound and sometimes only one or two channels of audio. What this means is the sound variation that could be produced was limited to only a handful of pitches, and games could only have one or two tracks of audio. Game designers had to prioritize which sounds were the most necessary, but as it became clear that the low-bit sound

[12] Not all video games use text bubbles, but many games that do not have voice acting have text bubbles either at the bottom of the screen or coming from the character's mouth in a comic book-like fashion, and these are often accompanied by some sort of sound effect in lieu of a human voice.

chips were untenable, gaming consoles and personal computers (PCs) were subsequently equipped with sound cards with wider capabilities. This allowed games to expand the range and quality of sound available.

Rather than being limited to playing one sound at a time, such as *Pong* (1974), games could have multiple sounds play at once through different channels. Each channel is a potential pathway that sound can travel – if a game were to have four channels, that means it can have up to four sounds playing at once, such as background music, the sound of footsteps as the player moves the character, the "shiiiiing!" sound effect as the character unsheathes their sword mid-run, and the voiceover line the character says as they rush into battle. In earlier games, because only so many sounds could be played at once, video game sound was simple-sounding but rife with symbolism. High-pitched beeps and boops represented feminine characters talking, while low-frequency sawtooth wave sounds represented masculine voices. Sometimes, there was no differentiation between voices; instead, there was a single sound effect for all text spoken by game characters, and the effect would play as the characters appeared on the screen, only stopping once the entire line of text was delivered. However, just because games now can produce "realistic" sound does not mean that games always do, and that is the interstice I explore here. Even when games have the technological capacity and budget to hire voice actors and Foley artists to produce game sound, game developers choose symbolic sounds instead of "realistic" sounds and rely on games' history of meaning-making and sound marking, so players still draw a logical congruence between what they see on the screen and what they hear as they play.

In this chapter, I primarily draw on the work of game sound scholars or media scholars who work closely with games, because the participative aspect of games necessitates an approach that accounts for interactivity, which other sound scholars' work may not cover. This is not to call theorists like Michel Chion or Jonathan Sterne wholly inapplicable—I reference their work in this chapter where appropriate. However, these scholars are not the foundation of this chapter, and that is by choice, not by oversight. My choice is informed by Karen Collins' work, *Playing with Sound.* There, she writes:

> When it comes to interactive media like video games, we lack the terminology and methodologies to study and discuss the players' relationship to sound. In other words, there is much to add to existing theories of sound in media with respect to interactivity and although academic writing about game sound is growing, we still often miss a fundamental piece of the puzzle that is essential to any theoretical account the player. Without a player, without the active play, it is just code lying in wait (2).

To parallel how game sound's limitation was in part solved by equipping games with technology that accommodated the need for more sound, game sound theory must be equipped with theory that accommodates the integral aspect of active play. While extant sound theory can assist and supplement aspects of game sound, there is a need for a dedicated theory to sound and interactivity so that games scholars *can* have the terminology and methodologies to "study and discuss the players' relationship to sound." I do not intend to send the message that video games can *only* adhere to a certain type of sound theory, and all other theories are inapplicable. However, one must consider interactivity and play and how that affects the creation of sound within the game space. This is especially integral to my theory of media

interstices, which is intended to account for the formal elements of a genre and how creators can manipulate those elements to create a product that represents experiences justly. Although there are plenty of instances where game theorists rightfully borrow theory from film, in the instance of this chapter, I hesitate to draw broadly from sound theory that was made for non-ludic media. Instead, I aim to draw connections between sound and interaction to join the conversation of other game scholars to account for player interaction.

Moving Pictures and Moving Fingers

It is important to understand the functions of game sound and how it is interconnected with visual and haptic modalities before getting into the specifics of how video games use and replicate the human voice. I also want to note that although I speak of video games as a "catch all" term, there are many subgenres of video games. Furthermore, video game developers can be anyone from individuals with no budget to entire teams with a budget of hundreds of millions of dollars. However, despite this variety, the formal conventions of games as a genre are often shared between these sub-genres. Exceptions to these conventions also exist and are worth investigating, but that is outside the scope of this chapter.

Early video game sound came along decades after the first sound reproduction technologies were released for other media – by the time that arcade and home consoles were released in the 1970s-80s, recording devices, telephones, film, and other technologies were well on the way to creating "realistic" reconstructions of the sounds they mediate. However, video games were faced with a limitation induced by both technological difficulties as well as limitations imposed by the spaces in which games were played. Although arcade games had

programmable sound generators (PSGs) that could create continuous music by the late 70s, it was more common for sound effects to be privileged over music due to the loud surrounding environment of the arcade, where the game sound had to compete against other game sounds and arcade patrons talking over one another (Collins 2008, 12). In other words, it made more sense to add momentary tags to the cacophony instead of composing a work that would get drowned out in the noise of the spaces of play. Additionally, many early sound chips only had a capability for one channel of sound, which meant that if there was ongoing game music, there would be no capacity left for any other sound to be layered on top. Game music began to develop in earnest in the mid-80s with the growing popularity of home computers that could support MIDI devices that early game composers could utilize. Once game composers had the means of creating original music for games on a platform that could support them, the kinds of game music available proliferated (25). Additionally, the hardware available to home computers to support this sound differed from the hardware available for gaming consoles, and game developers worked with the console limitations with varying degrees of success. Things were complicated even further because the popular consoles' technologies varied from one to the next, even within the same generation of consoles.

While the PlayStation worked with 16-bit CD ROMs and could support waveform audio, the Nintendo 64 operated through MIDI-based technology, which is a computational form of music. Nintendo was criticized at the time for using MIDI-based sound, which was considered as not having as much sonic potential as CD-based systems (71), but Nintendo programmers found other ways to make their use of music more dynamic such as by having cross-fades between tracks mid-map, rather than requiring a player to enter a new area to encounter a new musical

theme. At this point, there was no standard for composing music across different platforms since the conventions were still developing and the technologies were unstable. Karen Collins states in *Game Sound* that the limitations were not only reliant on technology, but also on social factors and game genre (34-35). In the earlier stages of video games, there was a skill divide between composers and game designers. The composers knew how to compose music, but not in ways that were programmable to the game. Conversely, the game programmers knew how to make the programs generate noise but lacked the musical training to compose. As a result, early game music was primarily remediated open-source music or sound effects.

However, one convention was quickly established as a norm for video games during this time – as games emerged to be multi-room, large environments, a single 8-bar loop no longer sufficed. Instead, composers had to make dozens of 8-bar loops (or longer) to accommodate players exploring different areas of the map for unknown periods of time. These individualized compositions needed to be distinct enough to show that the player was in a new place, catchy enough to have them engaged with the game, but not so repetitive that if a player were to spend an hour or more in the area that they would grow to resent that music. Although game music currently has developed to include full orchestral recordings, the ways that game compositions differ from other media is that they still must consider how they will seamlessly repeat as a player spends more time in an area or fade/crossfade into the new soundtrack as a player enters a new area or engages a new game state. Another element game composers must also consider is whether the game music is meant to be a sound-marked theme of a particular area or if the composition is meant to be ambient. *Legend of Zelda's* Hyrule Market Theme was composed quite differently from the Forest Temple Theme – the Hyrule Market is an upbeat set

of two 8-bar phrases that repeat back and forth, meant to mark a memorable place that also was not meant to have much time spent since the loop is quite short. The Forest Temple Theme, however, is more ambient, without melodic phrases, and is less repetitive since a player will spend hours beating the temple puzzles instead of seconds passing through the Hyrule Market.

Video game sound also ties visual, haptic, and aural modalities using an *input-assess* feedback loop. What this means is that the player will input an action into the controller, resulting in a reaction from the game code. There are both visual changes on the screen, such as the character moving, the next line of dialogue appearing, etc., as well as aural confirmation that the input was accepted. This can be shown in a variety of ways, including a triggered sound effect, footsteps accompanying the movement, or even a change of background music if a player enters a new game state. Ian Schrieber, a games scholar and game designer, defines game states as "Everything in the game together, including the current player resources and everything else that makes up a snapshot of the game at a single point in time." A player can easily go from a safe to a dangerous game state by entering an area with enemies, and the game state change can be signaled to the player by changes in music, controller rumbling, and other game output. Hearing a sound causes the listener to interpret the accompanying image differently, and in turn, their visual intake affects their interpretation of the sound. An example of this would be a seemingly safe living room suddenly becoming ominous when dissonant music is played, which then makes the otherwise-innocuous spilled coffee mug on the table appear more menacing.

Collins (2013) explains that meaning in games is generated through the interplay between sound and image, and if one were to try and remove either from its context, we would fail to discover its emergent meaning (27). Since video games are participatory, and their sound and visual cues are tied into actions based on player input, one cannot remove play from its context, just like one cannot remove sound and image from its fused context. She explains these sounds as "fused not to image but to action. In other words, interactive sound is event driven and the sound is controlled by an action or occurrence that is initiated by the game or by the player" (32). These action-based sounds have visual elements to them – pressing "A" to make Mario jump not only causes the infamous "brrrnng!" noise, but the player also watches Mario leap off the ground, and the duration of the jump is determined by how long the player holds the button down. The initial trigger of pressing "A" could have been a single, oncoming enemy and was only intended to be a short jump. However, seeing a second enemy ambling toward Mario could cause a player to hold the button down longer and soar over both enemies instead of only the intended one. The sonic "brrrrnng!" cue lets the player know that the jump is successful, thereby keeping their attention in the game rather than thinking defeat, and this encourages them to continue looking for future danger. Seeing said danger subsequently prompts the player to hold the button down to avoid both enemies instead of landing on top of the second, signaling Mario's demise. Collins describes how sounds in video games are commonly used as feedback to acknowledge an event (32), this feedback is often repeated and event-driven to map a player's experience to these sounds (33), and through this repeated mapping, the neurons in our brain tie the event to the sound and image. She writes,

> When we hear sound our brain responds if we are also seeing and experiencing the action that is creating the sound, we understand the actions of others because we mentally mimic those actions visually, sonically and gesturally. Moreover, the neuronal responses are much stronger if we have undertaken the action before we recreate our previous experience of those actions mentally. In other words, action related sounds are associated with an image and an action in our minds as discussed in previous chapters we are always listening casually, and sound is always an embodied multi modal experience (40).

Games are designed to create a verisimilitude between player action and character response, and this is done through the continuous affirmation of haptic input with sonic and visual output feedback loops. Although some games allow for character building and customization that allows the player to create a character or personal avatar that best aligns with how they identify, characters do not need to share any physical attributes with the player for players to feel linked to the character. The very nature of game design makes the controller an extension of the player's body and a bridge between player and game space, and it does not take long for a game to establish this (41).

One example that substantiates this argument is demonstrated in a *Couch Surfing* stream through *Serious Play,*[13] a collaboratory of game scholars. "Streaming" is a method of gameplay where players broadcast themselves online playing their game for a live audience and

[13] Although I did not take part in this episode, I am a member of *Serious Play,* where I was able to present and collaborate with other members to work through many of the concepts that later became chapters of my dissertation.

often interact with the audience, who can text in a live chat during the stream. In their September 2019 episode, Ryan House and Rachel Kathman play the co-op game, *A Way Out.* In this game, the players navigate different scenes simultaneously while playing on a split screen. While Ryan's character explores the prison, Rachel's character is forced to strip and walk through the person naked while carrying their prison clothes. For the few minutes preceding the stripping, Rachel is eager to explore the game, talk to the guards, learn the mechanics, and laughs while giving playful commentary. When her character is asked to undress, she thinks that it is just a cavity search and shows her shock when her character emerges from the room, still naked with the camera showing her character naked from behind.

Rachel: Ahh! A butt. [The camera pans to the front, showing the character's penis]

Rachel: [Screams, then laughs nervously]

Ryan: ...did they show dong?

Rachel: Yes.

Ryan: Sorry, everybody.

Rachel: I don't want to be naked anymore ... it was fun for a second [10:15*].*

Rachel then sits in uncomfortable silence while Ryan continues to explore the prison, and the shift in her attitude is so palpable that Dave Stanley, who is watching them play, comments from off-screen. Ryan, who is too invested in the game, did not notice until Dave spoke up.

Dave: it's funny how the character is exposed, and it can make the player feel exposed

Ryan: Oh... [To Rachel] do you feel exposed--

Rachel: YES! I feel very uncomfortable, like my palms are all sweaty [11:03].

Even though the player and character had significantly different identities, the game was able to position Rachel closely enough with her character that his exposure feels like her exposure. We can also apply Thing Theory and rhetorical listening to this interaction because while the opening sequence for the game to Ryan was to learn the mechanics and general flow of the game, the opening sequence for Rachel was an anxiety-inducing situation, and although rhetorical listening is used for understanding how a singular sonic event can be received differently by people based on their different lived experiences, events perceived through other senses can still have different reactions from different people. While both players experienced the same procedure of learning to identify with their character in the game, their emotional responses greatly differed. The game achieved player-character sympathy in very little play time because this excerpt is from the game's opening sequence, and the players only interacted with the game for less than ten minutes by this point. The player-character, action-based mapping works in a similar fashion to soundmarks.

Michel Chion defines soundmarks in his book, *Sound: An Acoulogical Treatise* as completely fabricated relationships between sound and its associated image or situation by repeating the association persistently to the point that they are conferred onto one another (8). Soundmarks are not exclusive to video games, but they are applicable here because sound is not only mapped onto the situation, but also to the player's physical input onto the controller. For each game, there is visual, aural, and haptic feedback when a player presses buttons on the controller. In *Super Mario,* if a player presses the jump button, they can expect to see Mario leap up with the accompanying "brrng!". *Not* hearing the sound would signal to the player that

something is wrong, because they expect to hear the soundmark when they jump. Soundmarks are not the only theory Chion develops that is closely related to game studies. Playing video games also entails *ergo-auditioning*. Chion describes ergo-auditioning as a kind of listening "where the listener is at the same time, in one way or another, the emitter of the sound heard…ergo-audition has its own laws and that these laws are different from those of audition alone" (75). The feedback loop of action-visual-auditory is an integral part of gameplay. For example, horror games rely heavily on ergo-auditioning because the player is placed in a survival mode where they must constantly attend to the environmental changes due to how they interact with the environment, or else they may miss a cue for danger and ultimately die because of it. In *Resident Evil 2*'s 2019 remake, it is not the bloody scene of the ransacked gas station that is the main cause for concern, but the heavy breathing of the unseen person who was bitten, signaling a dangerous third entity in the station: the zombie. It is also common in horror games for players to strategically interact with game elements, such as walking speed – walking too fast will cause their footsteps to be heard by enemies, and a stinger[14] or change to battle music will signal that they've been caught by an enemy, and the game will signal that to their players by having their controller input response result in either a slow-moving character with quiet footstep sound effects or a faster-moving character with heavy footstep sounds. Players can learn early in a game that when they hear heavy breathing (a soundmark), they must walk slower and attend to how loud their footsteps are (ergo-auditioning).

[14] "A stinger, sometimes called a sounder, is a short musical phrase, primarily used in broadcasting and films as a form of punctuation. For example, a sting might be used to introduce a regular section of a show, indicate the end of a scene, or indicate that a dramatic climax is imminent (News Manual)."

Even non-horror games follow similar conventions. The *Metal Gear Solid* series' iconic alert sound (usually accompanied by an exclamation point above the guard's head), not only cues the player to a change of game state from safety to danger but forces an entirely different style of play. *Metal Gear Solid* is a game of espionage where the player must sneak through the game maps unseen by guards. The game utilizes an assistive map in the corner of the screen that the player can monitor. It uses moving dots and conic lights emanating from those dots to symbolize the guards and their fields of vision so the player can preemptively determine movement patterns and places to hide out of sight. The player must also avoid their footsteps being heard, so when they are near the line of sight, they must also walk slower to avoid suspicion. However, once spotted, the ambient noise of the environment around the player changes to fast-paced music that concretizes the danger state, and the player is forced to stop sneaking in exchange for throwing caution to the wind and either knocking out or killing the guards that saw them, or running away until they are out of sight of any guards to return to a safe game state. The map of the area is also replaced with an alert countdown, letting the player know how long they must stay out of sight before they are able to sneak around once more with the guards back at their usual patrols. Because they no longer have the visual aid of the area map, the player is encouraged to prioritize remaining unseen and not progressing forward rather than strategically navigating towards their goal. Games like *Metal Gear Solid* place the player as the sound-maker by having their input into the controller have a direct effect on the game's state, and the responding visual and sonic changes directly correlate to the way in which the player effectively or ineffectively interacts with the environment, as determined by the game's rules.

Although the primary response when using a game controller is action from the character, it is not merely the input-action coupling that encourages player-character mapping. Not every action has an associated effect, and many games have an array of sound effects to signify some form of feedback from that action. From the satisfying 'pip' of the ball hitting the paddle in *Pong* (1972) to the 'whoosh' of releasing an arrow coming from the game controller in *Horizon Zero Dawn* (2017), sound is linked with player input and action. Collins writes,

> The connection to self-produced sound suggests that when players produce the sounds in a game in the sense that they are immediately receiving feedback for their own actions they are experiencing those cognitively as their sounds. Because players receive immediate feedback tied to their own actions the sounds become a part of self rather than others. in this way sound helps players to become a character or perhaps more accurately their character can become a part of their sense of self (44).

One of the strongest examples of this argument in practice is the array of auxiliary devices used for Nintendo Wii's remote. This remote was the first mainstream remote to be paired with different objects depending on the game played, as well as the first mainstream remote to be used with full-body motion and not just by inputting actions onto buttons and joysticks. The introduction of the Wii Remote (Wiimote) in 2006 changed the production of Nintendo games of the era because games could now be designed to include a wider range of haptic inputs, and auxiliary equipment such as steering wheels, guitars, and zapper guns were produced to augment the verisimilitude of performing a similar action with one's body to match the action on the screen. Although most games could still be played with a traditional controller, the Wiimote allowed users to physically mime their actions, such as swinging the Wiiremote to

mimic swinging a sword instead of pressing a single button to enact the action. Furthermore, Nintendo equipped the Wiimote with a speaker so that certain sounds would trigger from the remote as opposed to the television speakers, so that the differentiation of the sound's origin would place the player more realistically in the game world. The Wiimote serves its players in a liminal space of thingness—physically, it is an object that upholds the artifice of connecting the player to the game. Without the controller, there is nothing to input into the game. Without input, there is no action. Without action, there is no feedback. Without all of this, there is no connection between player and game character. However, the Wiimote serves a secondary purpose of transforming into different tools in each game. In *Legend of Zelda: Twilight Princess,* the Wiimote is no longer a game controller—it becomes a bow, a sword, and a fishing rod. In *Resident Evil: Umbrella Chronicles,* it becomes a gun. In *Cooking Mama,* it becomes a set of kitchen utensils. The Wiimote became gaming's most static shapeshifter. In my introduction, I established that a thing's thingness exists in its relation to others. Here, the Wiimote's thingness is in flux due to its relation to other game elements, and its thingness is then employed to create an empathetic, mirrored relation between player and character. Furthermore, because game developers recognized the controller as an interstice whose purpose is to draw players closer to the character and the game world, the game controller subsequently evolved with time and technology to better fit that purpose.

However, these conversations only scratch the surface of game sound. In this brief overview of the beginnings of game sound technologies, I did not discuss the diegetic versus nondiegetic use of sound in games, speech, or affective player responses in producing and responding to ludic sound. I mentioned but did not delve deeply into the adjacent studies of

how shifting game environments shape the aural production of games, how different genres of games produce different sonic assets, and how the technological limitations affected generic conventions across genres of games that persisted even once alternate, more advanced technology developed. I did not discuss the recording practices of game music, nor did I discuss the cultural implications of marking certain areas with certain kinds of music that could be steeped in racist overtones, as other genres are prone to do as well. I also want to note that there is an *incredible* breadth of sound scholarship that is entirely dedicated to the physics of sound and the practices of programming sound for different technologies. While my examples above listed a historical look at sound technologies in video games that may seem outside of the scope of the theory of sound studies, I want to stress that this sort of scholarship exists in almost all genres of communicative media and absolutely is covered by the umbrella of sound studies and sound theory. However, the physics of sound fails to account for the social perceptions and receptions of different kinds of sound - it would be a fallacy to broadly apply the ways we understand one kind of sound to the next. For example, consider the ways that we understand "noise" to the way that we understand "speech" ... although both are aural experiences, they are not limited to being purely aural, and depending on the context, these two categories of sound can be mutually exclusive or strangely interchangeable.

Games use a variety of sounds to represent speech ranging from voiceover recordings to gibberish to nonhuman sound effects. While some games such as *The Sims* or *Yooka-Laylee* use gibberish and funny voiced-over sounds to depict speech, games such as *Binary Distortion* do not have ‘human’ sounds at all throughout the entire game. Instead, the game marks speech by having five synthetic beats to signify the protagonist talking, and then those same five beats

except faster to signify anyone else talking. What is tricky here is that some can argue that in these cases, the sound bytes for video game speech *could* be sound effects. After all, MIDI trombone noises and "ch-ch-ch-ch-ch" do not sound like human speech, but because these sounds are mapped onto characters and intended to be aural representations of their speech, they are not sound effects in application. The use of 'sound effects' for character voices stems from the medium's technological limitations of the past that allowed the genre conventions to carry over as an aesthetic choice instead of the only option for making speech sounds. The function of speech in video games is less input-based than its sound effects and music counterparts and is directed either towards narrative purposes or directing the player in the correct direction. For example, *Legend of Zelda: Ocarina of Time* uses the character Navi to shout, "hey, listen!" to direct the player's attention to interact with her so that she can give them a hint on how to navigate a puzzle. However, we only ever hear her say, "hey, listen!" and the rest of her dialogue is distributed via text.

The practices of voice and speech in video games differ from other media because of the visual aspect that allows for gibberish and sound effects to be used in lieu of understandable speech.[15] In general, video games are perceived visually, haptically, and aurally - so as long as the player can see the character and read the text, game creators have the affordance of not recording voiceover lines if they choose to have a different sonic representation of speech. Virgil Anderson writes in *Training the Speaking Voice* that good oral

[15] Other media can still do this, but not in the way that video games can. For example, a comic can have gibberish in a speech bubble with a translation below the panel, but video games can have the simultaneous sound of gibberish with the legible text appearing on the screen instead of making the viewer have to look in multiple spots to understand the communication.

communication is "defined as to listen and clearly understand what is said, to speak and to be clearly understood, and to say what you have to say in such a way as to bring the maximum result both to yourself and to your listener" (3), and I challenge anyone to listen to Simlish, the gibberish language used in *The Sims* series, to "clearly understand" what is going on. However, there is something noteworthy that games like *The Sims* raise that challenge traditional conceptions of "effective communication" by focusing on other functions of speech, and it also brings forth a myriad of implications for identities and voice... and they can do this by being entirely unintelligible yet remaining effective and engaging. For example, *Sims 4* allows players to create characters and choose from an array of voices. A player can pick their sim's voice by using a pitch slider for high to low-pitched as well as overall qualities such as melodic, lilted, sweet, clear, warm, and brass. By adjusting the slider for pitch and combining with aural qualities of the voice, the player can map a vocal sound that they feel corresponds best to the character they just created. Although the language itself is incomprehensible, there is an element of tone and gestural motion made by the avatar that still provides enough communication for the player to know when they are happy, angry, hurt, or repulsed. The player can choose from a wide range of voice types during character creation, which can be related to what Pooja Rangan describes in *Sound Objects* as 'the skin of the voice' (130). She describes this concept as a person's voice being marked by their race through specific accents, dialects, vocabulary, and depth of voice. With Sims 4, players can choose to have marked voices that may not match the way the character looks, or they can choose a voice that they feel is appropriate for the character's appearance, and these decisions have wider cultural implications. We can also bring in questions of identity because it is common for players to

make at least one avatar that represents themselves (Green 2020) and, if their physical voice or appearance is not their ideal one, they can now adjust their ideal self with the click of a slider bar. Many trans men and women train their voices to sound more like their true gender, and a game like *Sims 4* allows them to map the voice they want onto the body that they have, which is -in part- an effective communication of the self even though the avatar speaks the unintelligible Simlish.

Transcending Sound: Aural Representations of Trans Experiences in Video Games

Equitable and diverse representation in video games has been an issue for almost as long as they have existed, and yet despite scholars' and some gamers' best efforts, game culture is woefully vacant of a wide range of represented voices. Progress has undoubtedly been made, but not to the extent where scholars, players, and people in the industry feel that there is a fair environment in game culture. My goal here is not to ruminate on the ways in which gaming has failed minority voices, but to bring to the fore certain practices that can be used as models for inspiration and ways in which we can create and play games that demonstrate the necessity of diversity in games. To do this, I will examine how sound is used as a means of representing embodied experiences. Earlier in this chapter, I established the player-character relationship but did not yet expand to authorship. It would be a mistake not to consider the lived experiences of the games' creators and how they remediate their experiences into digital games. By investigating how game creators remediate experiences that not all have lived through to communicate what it feels like to experience these events, we can have a stronger understanding of how we can discuss games in ways that focus on their sociocultural implications more than their ludic or narrative qualities. In my earlier chapter, I discussed how

comics remediated d/Deaf experiences, so video games are not the only media genre capable of remediating how different people perceive and affectively react to something. However, because games create a synesthetic link between the player and character through the game remote, video games create these relationships differently than other media, and this chapter explores these interstices within games.

The games I chose to demonstrate my theory are *Missing Memories* by Rose Quartz Klein and *Binary Distortion* by Riotjayne. Both games are by transgender creators who used their experiences to represent gender-related dysphoria, depression, and anxiety in their games. It is easier to discuss how creators' experiences affect gameplay when we discuss solo creators as opposed to multiple creators collaborating with one another to create the game artifact. Additionally, both games explicitly use sound to achieve their goals of representing dysphoria and other gender-related anxieties. It is also important to note that, while I am exploring trans[16] games that use sound to represent dysphoria,[17] I do not want to leave the impression that dysphoria is the only trans experience to be represented in games. Games such as *Dream Daddy* and *Dupli_City* represent trans characters without focusing on dysphoria, and there is a range of indie games across many genres that allow different trans narratives to be heard.

[16] I use "transgender" and "trans" interchangeably in this dissertation. There is no reason for this besides, like my own gender, I cannot pick just one way to describe it.

[17] "dysphoria" is the medical term used to help diagnose transgender people. This primarily comes in the form of body dysphoria and gender dysphoria, where a trans person's body does not have the characteristics associated with the gender they identify as. However, not all transgender people experience body dysphoria, and body dysphoria is not limited to the trans community.

In his article, *Beyond Play,* Thomas Malaby characterizes games as "semibounded arenas that are relatively separable from everyday life, and what is at stake in them can range from very little to the entirety of one's material, social, and cultural capital" (96) and that they are "activities that can accommodate any number and kind of stakes and are not intrinsically consequence free or, therefore, separable from everyday experience" (98). Games have the capacity to extend beyond the container of the virtual and, therefore, are an important medium to consider for promoting social change and understanding experiences that are not our own. Games also exist as a means of archiving a multitude of aspects of what society was like in the moment they were created. They reflect the technological limitations, what kinds of narratives existed, how certain groups were represented, etc., and can be used as a means of historicizing the existence of certain groups. Just as a comic reader can look at panels for as little or as long as they would like and re-look at their favorite panels, a video game player is in control of the pace and re-enter game spaces to learn more information from them through play and replay. As players spend time in the game world, they then become more familiar with the content of the game world. Game developers can—and do—use this affordance to communicate specific issues, experiences, and themes that they want to include in their game. In the examples below, I show how two trans creators use the affordances available in gaming to remediate trans-specific experiences such as dysphoria in ways that can be understood by people who have not experienced these things. A common misconception regarding trans and gender non-conforming people is that they are a recent phenomenon, but there is evidence proving the contrary dating back hundreds—if not thousands—of years. Video games are not—and should not—be the only archived materials regarding trans experiences, but they are one means of

preserving information. Lastly, the ways that video games can remediate experiences make them a valuable medium for composition.

In *Remediation: Understanding New Media* by Jay Bolter and Richard Grusin, the process of remediation is broken into immediacy and hypermediacy. Bolter and Grusin state that an immediate medium is "transparent" and that the medium is not immediately obvious to the viewer. Conversely, hypermediacy is when the viewer is aware of the medium. They write that,

> Hypermedia and transparent media are opposite manifestations of the same desire: the desire to get past the limits of representation and to achieve the real. They are not striving for the real in any metaphysical sense. Instead, the real is defined in terms of the viewer's experience; it is that which would evoke an immediate (and therefore authentic) emotional response. Transparent digital applications seek to get to the real by bravely denying the fact of mediation; digital hypermedia seek the real by multiplying mediation so as to create a feeling of fullness, a satiety of experience, which can be taken as reality (53).

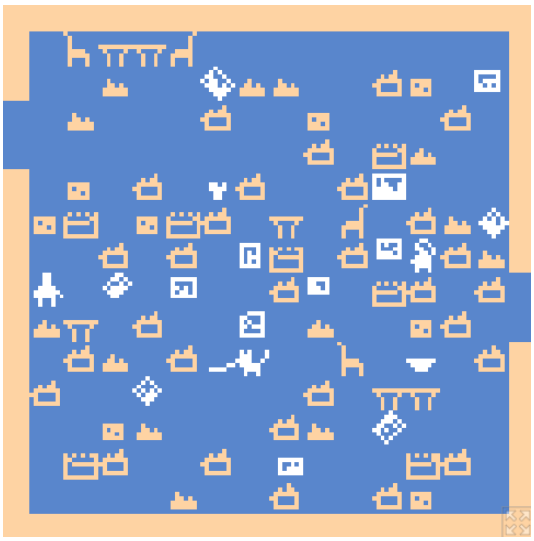
An example of hypermediacy in games is a health bar that a player must track to make sure that their character does not die. Although a health bar remediates a character's wellness and the player must attend to the wellness of the character in order to progress through the game, the player is aware that this health bar is unique to the medium. However, an aspect of games that reflects immediacy (i.e., transparent media) would be the rumble feature of the controller causing the player to "feel" the impact of their character hitting the ground from a large drop.

Malaby develops the idea of transparent media in video games by offering the term *hypomediacy,* which is a "style of remediation whose goal is to conceal the medium from the user" and differs from immediacy because transparent media "misleadingly suggests that mediation could ever be wholly absent" (Malaby 2022, 109-110). Earlier in this chapter, I gave the example of Rachel feeling exposed because her character was exposed, and what is that, if not the hypomediacy of games? Although Rachel does not identify as a man, she still had a visceral reaction as if she were exposed when her character's genitalia is shown. Between the player's control of the character and the immediacy of players associating with the character, games have the affordance to hypomediate an affective response akin to how a transgender person may feel encountering triggers to their dysphoria. It is not a direct one-to-one translation that remediates the experience exactly, but hypomediation assists with the production of the "really real."[18] Games that use hypomediation to simulate and remediate experiences allow people to partially step into a frame of reference that is not theirs. They can then question the "really real" when they are confronted with an experience that may directly contradict their own worldview in a similar way that rhetorical listening allows listeners to question how the same sonic event is perceived by different bodies. The experience of the hypomediation of lived experiences in games allows players the opportunity to question their habitus and complicate what "goes without saying."

[18] The concept of the "really real" comes from Clifford Geertz, who uses the term to characterize "all that goes without saying" (112).

Missing Memories

Missing Memories is an 8-bit visual novel created by Rose Quartz Klein, a trans woman game designer and academic who advocates for empathy and gender diversity in games. In *Missing Memories*, the player controls a pixelated character and navigates a room containing boxes, photographs, the character's mom, and a cat. The visual game space is cluttered by the objects that the player is forced to interact with to reach the end of the game. The aural space of the game has jaunty-yet-relaxed music. However, after the player picks up the first photograph, the mom addresses the character by their dead name. A dead name refers to what a trans person is named prior to their transition. When the dead name is invoked, the perky music is interrupted by a jarring, dissonant chord that is meant to affectively disrupt the otherwise quaint aesthetic of the game. The chord is invoked each time the player encounters an artifact from the character's past that is specific to their gender before their transition. This includes initials of their dead name, being referred to as a boy in their past, being a part of boy scouts, and gendered compliments such as "handsome." Not all items remind the character of their gendered past. There are some objects like an angel ornament from their first birthday, a picture of their grandmother, and baby pictures - all of which seem to have a negligible effect on the character beyond bringing up a fond memory for either the character or the mother.



Missing Memories, 2019

The chaotic landscape of the game seen above is like a minefield. Not every item yields danger, but there is the potential for emotional injury in every step. The player does not know which items will cause the dissonant, disruptive sound and which are innocuous. Unfortunately, the only way the player can complete the game is to pick up *all* the items. Only then, once they talk to the mom, can they see the end of the game. The player is left with a blank, blue screen and the background music while the following text appears:

> I often look back at those moments and wonder if I could have been kinder to myself ... Instead of just ... following the rules. If I had pushed more against the boundaries, maybe I could have been happier (*Missing Memories*).

Although the game offers slight detours, such as an additional room where their dad reminds them to finish helping their mom go through the boxes of photographs or petting the cat, the player is corralled into going through and picking up all the objects. If the player attempts to talk to the mom before everything is looked at, then the mom will request for the player to

continue going through the items laid out in the game space. After considering the endgame text, the player is reminded that all the memories bear a weight of gendered self-reflection for the character, even though they were not marked by the jarring sound played when the character is misgendered or is addressed by their dead name.

What is notable here is that the dissonant chord that is invoked at each dysphoric event is still a tonal chord, which differs from many of the other games in its genre. In games, an aural disruption is generally a noise – something nonmelodic. However, *Missing Memories* uses a seventh chord to aurally announce the dysphoric event. The seventh chord, in Western music theory, is what precedes the resolution of a particular phrase or song. The sound itself leaves *something* to be desired, but it is typically not considered something that is "noise," but a chord that has dissonance. However, because this chord is associated with dysphoria and misgendering through gameplay, it transforms from a musical building block to "noise." Michel Chion writes in his book *Sound,* that English reserves the word "noise" for something that is parasitical (58). The seventh chord, by association, becomes parasitical because it attempts to overshadow the easygoing music and siphons away the player's attention. The seventh chord asserts itself as what Chion calls a soundmark. Although Chion primarily gives examples that soundmarks identify locations, *Missing Memories* uses soundmarks to signify the abstract issue of gender dysphoria. It is possible that these soundmarks can stretch beyond the confines of the game if they imprint strongly enough on the player. Seventh chords exist out of *Missing Memories* – if a player hears a seventh chord, it is possible they can later associate the sound to dysphoria. Although I don't believe that *Missing Memories* uses the seventh chord in a way that

it would make such an impression as I described above, I would make the case that, if done effectively, games can create soundmarks that bleed out into the analog world.

Binary Distortion

Binary Distortion can be defined as a visual novel game, but its creator (RiotJayne) describes it as a "kinetic novel." RiotJayne describes the game as the finale to her trans trilogy that explores trans and gender-related issues. The two games that precede *Binary Distortion* are *queered static,* an interactive fiction piece, and *Tranxiety*, a roleplaying game. Unlike in *Missing Memories,* the sound in *Binary Distortion* does not just fill the aural space. Instead, it **demands** attention and unease. Each burst of text is accompanied by five strong, pitchless beats. Atonal, cacophonic music plays in the background during most of the game, and the only reprieve is when the player is in the space of the character's room. In the bedroom, the music is still unsettling, but it is at least calm. During the rest of the game, the music aims to reflect the narrator's stress and anxiety in the moments of recounting their past. In one way, it is ambient – the music reflects the surroundings for the player-character. However, the word *ambient* suggests in its flavor that it is also meant to be soothing, and the music in *Binary Distortion* is anything but that.

While *Missing Memories* has music that places the players in a "safe mode" until disrupted by an event of misgendering or misnaming, *Binary Distortion* has music that aims to position players in a constant state of distress until disrupted by …. nothing. There is no safe mode in *Binary Distortion.* The room, where the player returns to after each chapter of the game, still has unsettling music, but it is not as anxiety-inducing as the music in the chapters of

the game. The closest to "safe" that the player gets in this game is "not as bad as before." If we were to consider the aural space of the game like a balloon filled with air, the music fills the balloon well past its bursting point, and yet the balloon does not burst. It is constantly holding the sound together, just barely, and at great physical cost. There is an overwhelming amount of misinformation about trans identities, health, and biology that lead to overt and subtle forms of transphobia. In the first half of 2022, legislators proposed over 100 anti-trans bills (Freedom for All American), which is a staggering increase from 2015, when there were only 25 bills proposed in the entire year (Human Rights Campaign). With underwhelming support and overwhelming instability of access to gender-affirming care, gender dysphoria is not simply a battle with one's own anxiety, but with society's as well. *Binary Distortion* argues through its composition that there is no safe mode for trans individuals, and so the player must play in similar misery.

The game also incorporates glitchy visuals during the chapters, which creates an unnerving and uncanny experience, but the bedroom is visually tame in comparison. The visual and auditory nature of the game allows the player to experience the aural event as an amalgamation of the two rather than as separate cause-and-effect relationships because the game rarely uses sound effects that are a cause of what is on the screen. Instead, it couples unnerving music with glitchy visuals to create an affective package. Steph Ceraso writes that, "When listeners attend to a sonic event via multiple senses, mundane experiences can be transformed into aesthetic experiences" (35). Because the game has multiple modalities demanding attention, the player is positioned in a way to have to reconcile the emotions, depression, and anxiety that the narrator faces – and this is not even addressing the dialogue

and text that appear in the game. The dialogue is fully laden with resentment and abhorrence towards the narrator's body and how others labeled them based on their perceived gender.

The five pitchless beats that accompany the bursts of text come in two speeds: slow and fast. The slower pace accompanies text that demonstrates the narrator's thoughts, ideas, feelings, and speech. However, when other characters speak, the text is accompanied by a quicker set of five pitchless beats. At first, it is unclear why some beats are slow while the others are fast, but throughout the gameplay, it becomes clear that the quick beats are meant to signify *others.* The beats happen when doctors speak, when bullies speak, when the narrator's parent speaks—the nature of the text does not matter in terms of whether the words invoke negative or positive emotions. This decision becomes even more complex when the five beats occur in text bursts that are said by the narrator, but when they are disassociating from themselves. One instance of this is when the narrator is performing masculinity by continuing to date women, and when they are talking to their girlfriend, their text bursts are represented by the quick beats instead of the slow beats.

It is important to note that I do not assume that the player will necessarily listen rhetorically, empathize with the narrator, or is guaranteed to feel anxiety from the music. However, I do posit that the game creator specifically made the choice of this aesthetic to represent the narrator's anxieties and dysphoria. Choice is an important aspect to sound theory for the sound theorist Rick Altman, who writes in *Sound Theory Sound Practice* about the importance of spectator decision-making patterns and affordances that sound and technology provide. However, not all choices are made with the same level of metacognition. There are many unthought choices in the production of media, and instead, it is more useful to focus on

affordances instead of choice. For example, an affordance of gaming is that the player does not have to play the game with sound. They can adjust the visuals as well as sound effects in the game settings menu or, alternatively, can mute the game altogether. The player can also decide not to empathize with the narrator, and it is even possible that the player does not understand what the game is trying to achieve. Both game maker and player make nontrivial decisions in the creation and consumption of the media, which adds to the complexity of the sonic event—and these decisions are guided by the affordance of possibility. This is the affordance of an interstice that has been revealed by the game designer and available technology because the level of control players have over sound and the available ways game developers are able to tell stories have expanded since video game's nascency.

Furthermore, the player's past experiences can affect how they interpret the game. What if the player said transphobic slurs in the past and is now confronted with the affective reality presented in the game through the perspective of someone who received those transphobic slurs? How does the experience differ from someone who is already sympathetic to transgender people or for those who are also trans or nonbinary? Concepts such as rhetorical listening and embodied listening from Wysocki and Ceraso—as explained in earlier chapters—prove useful for analyzing the affect of games. It also becomes more prominent when linking these tools to remediating dysphoria in video games. Although there are some transgender people in politics, most of those passing laws on trans bodies are not trans, and most who talk about transgender people in the news and other media are also not trans. However, games like *Binary Distortion* and *Missing Memories* flip this narrative by letting trans people narrate trans

experiences and cisgender[19] people interact with limited control. They can affect the pacing of the game and how they get to the end of the game, but ultimately it is the game maker—who in these two examples is transgender—that controls what options there are in the game and what story is told.

Binary Distortion takes control of the narrative by having a mostly linear play capacity, and the player encounters the story and clicks through the lines of dialogue without the option to choose different pathways, meaning that the narrator has more control in this instance than in their past experiences. The narrator is not affected by the player's interaction with the game. The narrator does not have to accommodate themselves for the realities of other people because it is the player that must now accommodate the narrator's reality. In a nation that has neo-Nazis attempting to exterminate and scare trans people into silence,[20] where politicians in power systemically erase trans histories and narratives,[21] and where many trans people remain closeted for years, *Binary Distortion* shows a rare example of a trans person not only controlling "the narrative" but controlling *their* narrative. The player does not have to interact with the game and can stop at any point, but they cannot change the game's narrative. It is this limited

[19] "Cisgender" is the term used to describe people whose gender is the same as what they were assigned at birth.
[20] Mandler, C. "Ohio Drag Queen Storytime Canceled amid Armed Protests by Far-Right Groups." *CBS News*, CBS Interactive, 5 Dec. 2022, https://www.cbsnews.com/news/ohio-drag-queen-storytime-event-canceled-amid-armed-protests-proud-boys-patriot-front/?fbclid=IwAR2aQLGVUt3avewnEfD9TvpwzGFSTJSW13rbraIKMvLEVoaSmYimGnQxFf0.

[21] "Gender Affirming Care: Setting the Record Straight as Gov. DeSantis Continues Attacking Trans Youth and Sharing Misinformation about Gender Affirming Car." *Human Rights Campaign*, https://www.hrc.org/press-releases/gender-affirming-care-setting-the-record-straight-as-gov-desantis-continues-attacking-trans-youth-and-sharing-misinformation-about-gender-affirming-car.

contrivance that gives the player just enough authority to choose the pace of the game but not what the game is about and how the characters are represented. The players are akin to the person sitting in the front passenger seat of a car and helping the driver navigate to their destination—they can help dictate the path they take to get to the endpoint, but the endpoint is ultimately dictated by the driver. However, the player does still have input after the game is done. The player still has the control of interpreting the messages and gameplay that was both intentionally and unintentionally crafted by the game developer, and how they interpret the message and where they disseminate these messages is up to the player. In my pedagogical interlude that follows, I examine students‘ responses to two games and their main takeaways from them. While it is outside the scope of this dissertation to do an extensive review on how players share their reactions to games, it is at least important enough to acknowledge that players still can affect a game and how it is spread and understood by others that may play it later.

Another way to understand how *Binary Distortion* remediates trans-specific experiences is through Clifford Geertz’s concept of the *really real,* which I briefly mentioned earlier in the chapter. He describes the *really real* as a set of arbitrary dispositions that "color their [people’s] sense of the reasonable, the practical, and the moral" (112). Because of the subjective nature of what is really real and how cultural, historical, and sociopolitical contexts can affect what people define as really real, tension arises when two perspectives collide. Thomas Malaby asserts in his chapter "The Digitally Natural" that games can provide dialogic exchanges between narrator and audience. Although the player cannot change the narrative in the case of *Binary Distortion*, they still enter an exchange with the creator when they play the game.

Malaby states that games permit the players to be both the audience as well as the medium because the game happens through their participation. As players see events unfold as a response to their action and inaction in the game, they encounter another contrived reality and framework of rules that may contradict their own. As they make sense of the other reality in comparison to their own, they may learn to renegotiate their understanding of the "really real".

Alternatively, we could consider remediation in games through the lens of Iris, as described by Wark and Galloway. *Binary Distortion* is an example of the "too real" and the "too much." One could read testimony of trans experiences or definitions of dysphoria to understand the concepts, but it is another experience entirely to be placed in a near-simulation of dysphoria. *Binary Distortion* wrestles with the "too real" through a presentation of raw images and text that are so emotionally exposed that it is difficult to file the experience away as "just a game." *Binary Distortion* portrays the reality of the trans or dysphoric narrator who endures gender-related anxiety and depression, a narrator who is forced to perform gender, and a narrator who must persevere in the face of adversity. While it may seem hyperbolic at first to say that Iris is the best metaphor to fully encapsulate the affect of dysphoria, one could argue that it makes perfect sense when over 80% of transgender people report that they have been suicidal and 40% of transgender people have attempted suicide.[22] Such staggering numbers do not—and cannot—come from an experience that is wholly represented through one mode alone. Instead, it needs something that is "too much," "too real," and "really real."

[22] Austin, Ashley et al. "Suicidality Among Transgender Youth: Elucidating the Role of Interpersonal Risk Factors." *Journal of interpersonal violence* vol. 37,5-6 (2022): NP2696-NP2718. doi:10.1177/0886260520915554

Transitioning to a more equitable environment

Both games discussed above use sound in a way that does not privilege the object or person making the sound. Instead, importance is placed on the person who is perceiving that sound: the game's player. This shift is important when considering rhetorical listening and embodied listening because when we consider how players will receive aural stimuli, we can create games that have the power to move them. To do this, our focus of critical inquiry of sound must shift focus from how we reproduce sounds to how we can use sound as a tool of representation and as a tool of change. While the study of the reproduction of sound is important for understanding technologies and methods of furthering sound reproduction, this line of inquiry does not necessarily tell us much about the ideas, things, and people that these sounds are meant to reproduce. Additionally, it does not reflect the symbolic representations of what listening subjects perceive. For example, we can reproduce the sound of gunfire in games, but an accurate reproduction of the sound does not tell us what that sound affectively does to the player. Additionally, we do not need to reproduce an "accurate" sound of gunfire to affectively impact a player if a soundmark is established in the game to represent what gunfire is and "sounds like."

In terms of listening and representations, we must consider the implications of different embodied experiences to anticipate how a wide range of identities will perceive a certain sound, as well as maintain awareness of how to represent specificities of different people. Steph Ceraso writes that,

> Multimodal listening invites listeners to take "a stance of openness" by imagining how bodies different from their own might interpret or experience particular sonic situations— how a young woman walking home alone from a bar at night might experience the sound of footsteps behind her; how a black man driving on the highway might experience the sound of police sirens; how immigrant families might experience the cheers and roars of a crowd in response to a politician's speech about building walls and travel bans; how individuals' responses to any of these examples would vary depending upon the specific space or place in which a sound occurs, or the person's intersectional embodied identity (i.e., their interconnected experience of race, class, gender, sexuality, ethnicity, disability, etc.), or the person's past experiences with similar sounds (152).

With embodied sound in mind, how can we now approach a game like *Binary Distortion* from the perspective of someone with sensory processing disabilities that feel exceptionally overwhelmed by the cacophonous soundtrack? What about *Missing Memories* from the perspective of someone who has never played a video game before and does not know how to navigate the space because there are no instructions?[23] Or either of these games from the perspective of a closeted teen who is hiding the gameplay from their parents and must keep the sound off to not arouse suspicion? With over 100 anti-trans legislative bills proposed in the first half of 2022, the importance of understanding and advocating for transgender people and understanding the misinformation about them has never been more dire. As previously

[23] Ironically, I wrote this line two years before I used this game in my classroom and my students who did not habitually play video games encountered this very issue. I discuss this in the second pedagogical interlude.

mentioned, this number is a staggering increase from years prior to 2016. Many of these bills are founded on myths perpetuated by those who do not know the basics of trans identity and health and are actively censoring literature written by professionals who educate about gender identity. This censorship will not only block access for future trans people to access the information they need but also limits professionals of various fields from being able to understand the expanded effects of the services they perform and the way they interact with trans people. This censorship and lack of access will result in an increase in suicide rates from transgender people and, subsequently, censor the voices of transgender individuals who otherwise could have advocated for themselves or created media that allowed others a glimpse into their experiences.

Teaching media literacy and exposing interstices in media that students analyze in the FYC classroom also exposes them to content made by those that have used these interstices to tell stories on their own terms. The creators of *Binary Distortion* and *Missing Memories* used the affordances available in video games to demonstrate a specific experience that transgender people face that many cisgender people cannot understand. This experience can sometimes be described in words, but other times, words alone are not enough. By examining a text like this, students simultaneously are shown examples of how to compose in innovative ways as well as given more nuanced perspectives into interconnected issues. The nuanced perspectives then demonstrate the complexity of the nature of the "really real," what it is like navigating the world through different bodies and perspectives, and how this knowledge can be used to explore more pathways to finding information for whatever project they are doing.

Ceraso argues that multimodal listening is not a "one-size-fits-all practice. Thus, multimodal listening pedagogy offers flexible listening strategies that account for diverse bodies instead of proposing that all listeners should (or can) listen in the same way" (35). Thus, when creating and distributing games, we must be critical at every turn. Congruently, game studies scholars also call for a shift in game creation, but one that goes beyond just the aesthetics of play. Galloway says in *Gaming: Essays on Algorithmic Culture* that there needs to be radical action in gameplay. He writes,

> By radical action, I mean a critique of gameplay itself. Visual imagery is not what makes video games special. … Artists should create new grammars of action, not simply new grammars of visuality. They should create alternative algorithms. They should reinvent the architectural flow of play and the game's position in the world, not just its maps and characters (125).

Now, we are opening beyond what sound theory on its own provides, but how it can now operate in conjunction with the haptic nature of gameplay. In what ways can we radically change gameplay? Is radical action a key to making soundmarks reach beyond the boundaries of the game? Furthermore, can we use radical action to expand outside of gameplay by making players reconsider the architectures in the material world? Although this dissertation's focus rests upon sound in games, I would advocate for any sensory or affective impression that impresses awareness of different identities to others and a wider representation of voices … and from there, we can watch how sound transcends itself, transcends games, and can be an agent of change. Thing Theorists maintain that a thing becomes a thing when an idea needs relief. In the two games above, the creators had ideas and experiences that needed relieving

and remediation into something new—and so they remediated these thoughts, emotions, and ideas into games. Subsequently, these games act both as agents of re-remediating games into new ideas of players' minds as they connect their own frames of reference and as solidarity to players who have lived experiences like the characters in the game. In a historical moment when many US politicians are either proposing or complicit with these proposed bills that lead towards a genocide directed at trans people, creating these games is not just an act of remediation but also an act of resistance.

INTERLUDE II – Video Games

I assigned playing *Missing Memories* and *How Are You Doing?* By Rose Quartz Klein to my students in my College Writing and Research class in the Spring of 2022 with the intent to have a discussion of video games as a genre followed by a discussion of their observation of these two short games. However, when I asked how many of them played both games, only one raised their hand. When I asked why, several students admitted to opening the games in their browsers and getting to the title screen, but they were not able to start gameplay. They tried clicking the game screen, pressing the arrow key, and pressing the space bar with no success. The button they needed to press to start the game was the "enter" key. I did not realize that there were not any instructions on how to start the game on the website, and I did not think to give my students these specific instructions—I instinctively knew how to start the game because I have played thousands of hours of video game content. Although I had to stifle my own frustration that none of them reached out for help or *seemed* to spend more than a minute trying to figure it out, I decided to turn this moment into a brief lecture and reflection on genre literacy rather than homework compliance.

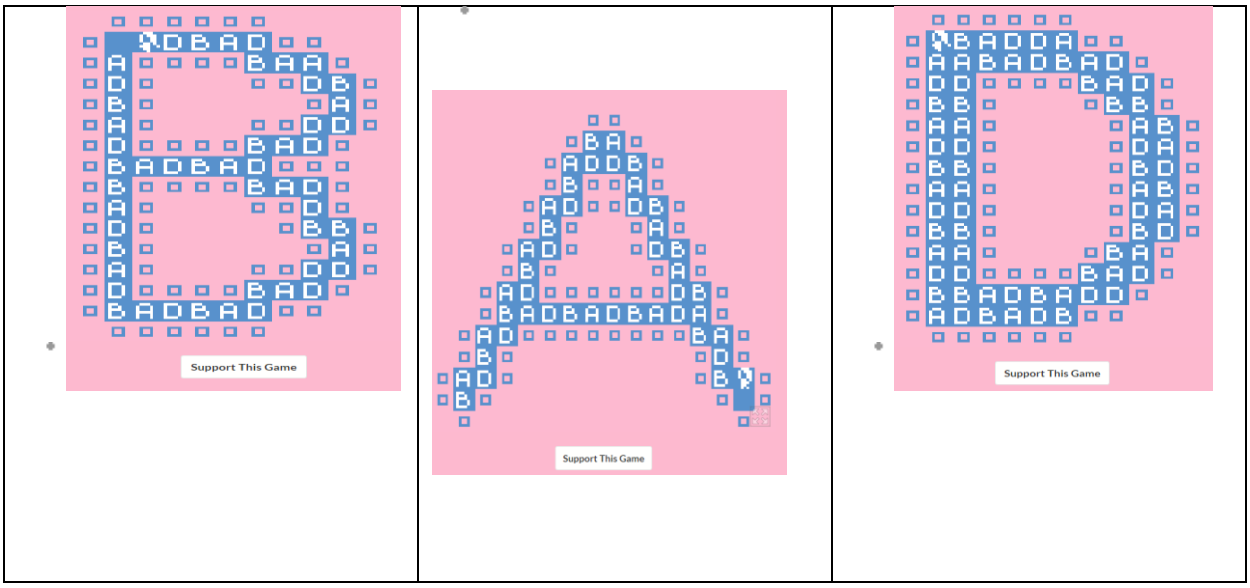
In our literacy discussion, we discovered that most of the class only played casually and knew how to use game controllers for console gaming but typically did not play games on the computer and were not the ones to set up the games when they did play on consoles. The students who identified as gamers led a brief discussion about tutorial modes and stages in games and how those tutorials led players to become fluent in the game and, by extension, other games. After a while, there comes a fluency where the gamer can navigate the game space in a way that "makes sense" based on repeated conventions, even though they did not

complete the tutorial for that game or even if that game did not have a tutorial stage, such as with *Missing Memories* and *How Are You Doing?*. Because both games are short enough and can be played in as little as a minute, I decided to play *Missing Memories* for the class on our projected screen and then invite a student to play a second time. I asked students to call out things they noticed about how the game used sound, and they were quick to note the jarring seventh chord I described in the previous chapter, the rainbow colors when the character's mother uses the appropriate name, the jarring movement of the text when the character's mother says something unpleasant, and other instances that proved that they were interpreting how the mother's voice is perceived by the character even though there is no voiceover in the game; only text.

When it came time for a student to play, I was pleasantly surprised when one was eager to get up and participate. As soon as I asked for a volunteer, her hand shot up in the air, and she walked to the computer in front of the class, talking about how she wants to play now that she knows how to get past the enter button issue. The class watched as she struggled at first to navigate the game space—she knew to use the arrow keys after watching me play but would have a mis-input or try to pass through a barrier and get caught on a wall. The class observed fluency at play between me—someone who knows games well—and the student, who is an emergent gamer. Rather than uncover more observations about sound and voice, the observations people called out were now comparing the play-throughs between the student and me, noting how I talked through the game and told stories about all the different play-throughs I had whereas my student vocalized their confusion and epiphanies as they learned to navigate the game. Since the students were more comfortable, and it appeared that we were

all past the awkward admittance that almost none of them played the assigned games for homework, I asked for a "brave volunteer" to play the second game without me playing through it first. Someone volunteered almost immediately, although not with the same vehemence as my first volunteer, who was seeking redemption from the enter key issue.

While *Missing Memories* puts the player in the perspective of a transgender person, *How Are You Doing?* is a game that places the player in the perspective of a person with autism. This game was made in eight hours as a part of the 2020 Autistica Play Jam, where game developers were challenged to make a game with the theme "Hidden in Plain Sight" to bring awareness to people with autism and the issues they face, which is a note I shared with the class to give the game context to them. In the game, the player approaches different people at a party, who all ask some version of "how are you doing?". As soon as the question is posed, the upbeat party music stops and is immediately replaced by a dissonant ambiance meant to impose an anxious atmosphere on the player. They then must navigate picking up letters in three different maps in the shape of "B", "A", and "D". These maps are on a timer, so the player may not be able to finish all three maps before they are shunted back into the party atmosphere again and the character responds with some variation of "good, how are you?".



The player is exposed to the inner mechanics of the character, who struggles to navigate and place their emotions into words, but ultimately responds with a neutral-to-positive answer since that is the "socially acceptable" thing to do.

Since only one student played this game, and because I knew this game would be mildly jarring, I watched the player's and the class's live, first-time reactions when the map and music suddenly changed from a party atmosphere to an alphabetic horror. There was confusion at first, especially since they were only exposed to the "B" map, and there were no explicit instructions on what to do. The player cautiously began to pick up the letters and gained speed once nothing in the game dissuaded them from continuing. When the player got to the "A" map, he began to piece together that he would have to go through all the letters in "bad" before being able to progress. He got about a third of the way through "D" before he was cut off and thrown back into the party map. There was a brief pause as he tried to think of where to go next and decided to go up to speak to the next-closest person at the party. The character

asked how his character was doing, and he was thrown back into the "B" map. Since he'd gone through this before, he was quicker to start picking up the letters. He collected most of the letters in "D" when he was thrown back into the party, but because he was rapidly pressing the button to move, he accidentally interacted with the same character a second time, which threw him into the "B" map once again. There was a rumble of giggles through the room as this happened, and my student laughed his frustration off. By that point, the message was made clear that this game was *not* fun, nor was it meant to be. This challenged the conclusion that the students drew earlier in our discussion of genre conventions, where they stated that a game's purpose is to entertain and to be an escape from the "real world," which led to a good talking point in our discussion after gameplay. I told my student he was welcome to go back to his seat, which he was happy to do since he was less eager to pick up letters when the only reward was to have to do it all over again.

After we had a small laugh over the frustrations that came with playing these games, I posed the following questions to the class. The students were instructed to write down an answer to any one question, discuss their response with a partner, and then we would discuss these questions as a class. This process is called "think - pair - share," which I find more useful than asking students to give their thoughts aloud to the class right away when asking for deeper answers, and it provides opportunities for shyer students to express their thoughts in ways besides in front of the entire class.

- Are there any other ways you think the information in the game could be conveyed in a different medium/genre?

- What do you feel was particularly effective or ineffective that this game did to help convey Rose's feelings about their experiences?

- Besides using a search engine like Google, Yahoo, DuckDuckGo, etc... How else could you find information related to the issues Rose presents in the game?

- What questions do you have that were brought up by something you encountered in the game?

Because we had already warmed up by discussing genre conventions, rhetorical situations, and other rhetorical aspects in relation to games, and we had just spent 15 minutes playing and making informal observations, the students were well-prepared to tackle these questions in a meaningful manner. Students of all gaming experiences analyzed the affordances of the genre as well as the formal elements that were employed to achieve the game's intended effect: putting the player in the shoes of the character so they can glimpse into the lived realities of trans and autistic people. We were also able to tie our genre analysis to larger issues such as information literacy, citation chasing, and the contingent nature of authority. Although I did not gear this activity to include talking about interstitial spaces in media specifically, it did lay the groundwork for this concept later in the semester, when they would eventually remediate an academic paper into a different genre for a specific audience.

MOVEMENT III - What's Really Happening?: Actual Play and the Tabletop Voice

This chapter is inspired by my broadcasting professor at Suffolk County Community College, Bill Terry, who unknowingly influenced what would end up being the foundation of my podcast-based research. My work cannot be completely understood or appreciated without this anecdote from 2016. One of the first friends I made while enrolled in the Radio and Television Broadcasting program at Suffolk County Community College had a speech impediment. It was not so bad that he was difficult to understand, but the average "broadcasting tips and tricks" would not make him sound "normal." Early in our enrollment in this program, I worried how my friend could ever make it in broadcasting when he did not have a voice anything like I heard in my almost two decades of mass media consumption. His voice was high-pitched for a male, he couldn't say his R's well, and yet he dreamed of having his voice broadcast on radio and television. According to all the textbooks and articles I had read and the news I had watched so far, his voice was not fit for broadcasting. I never expressed these concerns, but if he had asked what I thought of his voice, I may have told him he should consider being behind the cameras instead of in front of them. Fortunately, he never asked me my opinion. Instead, he voiced his concerns one day to Bill by saying how he didn't know how he'd be able to "make it" without completely overhauling his voice. Bill's response immediately changed how I viewed my friend's voice and forced me to confront the biases I had developed. Bill vehemently told him to never change his voice but to utilize his voice to create a personality listeners would love. So long as my friend gave his listeners reason to want to listen to him, the quirks of his voice do not matter. Although he gave plenty of feedback on our vocal delivery in our projects, it was never

about our accents, natural pitches, or impediments. Instead, he assisted in making the voices we had as engaging as possible while finding the niche our voices belonged to.

Bill's approach somehow still aligned with what I read in textbooks, but not in the way that the textbooks implied. There is a litany of vocal qualities to avoid in broadcast, according to these books. Voices that are too high-pitched are considered weak and lacking authority (Chantler 22). Thin, light voices are considered "handicapped" and must be remedied with a firmer tone (Anderson 17). Women's voices must be feminine enough to make the listener imagine an attractive female (Mildorf 245) but not so high that it's unpleasant (Anderson 18). Then, there are editing "best practices" that broadcasting textbooks teach. Pauses between thoughts, filler words such as "um" or "like," deep breaths, rambling explanations, and repetitive phrases are the first things on the chopping block for audio editing (Chantler 18). If all these qualities are unsatisfactory to exist in media that's been professionally made and edited to demonstrate the "best" and "most efficient" kind of speaking, then what does that mean for the people who *do* speak like that? A study published in the *Journal of Nonverbal Behavior* found that listeners assume that the presence of filler words such as "um" is an indicator for lack of preparation, and the listeners preferred there being no pauses or filler words between thoughts (Christenfeld). In this study, one group of listeners was given an unedited version of a speech while another group was given an edited version that did not have filler words in it, so the perceived lack of preparation is formed from a myth of what filler words truly mean rather than a true lack of preparation, since the speech was the same except for the editing that was done after the speech was given. While there is no link drawn in the study to whether these preferences were shaped by media they consumed, it at least confirms that the presence of

filler words invokes a more negative view of the speaker than if filler words are not present. Therefore, if someone were to give a well-prepared live speech complete with natural pauses and filler words, because editing cannot be done live, their audience may conclude that the speaker is underprepared simply because of the natural processes necessary when translating thoughts to speech—and that is not even accounting for any other barriers that may exist that prolong pauses in speaking, such as a disruption distracting the speaker, or the speaker losing their place in the script and needing to scan to find where they left off.

Additionally, these editing practices dictate what is necessary information and what is not—but these definitions are not universal and often ignore different cultural practices of communication. Broadcasting textbooks advise aspiring producers to remove as much as possible while preserving the main elements of the speaker's ideas, but this ignores that in many cultures, the context is as important as the answer. Harry C. Triandis observes in his article "The Self and Social Behavior in Differing Cultural Contexts" that Latino Spanish speakers tend to lack the linear and "low context" answers that American English speakers privilege (509). What this means is that an English speaker in America would have an easier time answering a yes or no question with a simple "yes" or "no" because that is enough to answer the question for their culture. However, their Spanish-speaking neighbor would be more likely to answer a yes or no question with a story that provides context to their "yes/no" response. This cultural difference is explored by various scholars and translators while negotiating translingual and intercultural communication (Gonzales 2018, Koksal 2020; Miremadi 2004) and others have compared high-context and low-context communicating cultures in radio

interviews and advertising (Bai 2016; Yu 2013), but less work has been done regarding examining how audio editing practices can whitewash a speaker.

The recording and editing practices I read in my undergraduate courses and as research for this dissertation list a myriad of practices regarding how producers and voiceover artists can perfect recorded speech, perpetuating practices that enable cultural erasure, a habitus of ableism, and discouraging voices that transgress gender norms. However, Bill Terry provided an interpretation of effective broadcast practices that went beyond the advice of "train your body to speak better" that the books provided—instead, he told us to train the listener. With a single response, he struck down my assumptions that my friend would not be hired because his voice did not match the voices of the news anchors and other voice artists I had encountered. He reframed my thinking to recognize that I still understood and was entertained by my friend when he told stories and when we worked together in the recording studio. The "issues" of his voice had only been issues to me because his voice was *different* and not because he was unintelligible. This led me to my realization that just as I had been implicitly taught what professional voices were meant to sound like based on the kinds of voices I heard on the television and radio, others could be implicitly taught that a wider range of voices are professional by having those voices more commonly represented on television and radio.

In academic writing, scholars are told to be direct, clear, and to eliminate unnecessary words. Papers should have a clear thesis, and that thesis should appear as early in the paper as possible in order to provide the context and framework necessary to allow the reader to read all the subsequent evidence with the author's argument in mind. However, I have typed several pages of text without presenting my thesis. Does that make my writing ineffective? Does that

diminish the value of the context I gave and the story I told about my friend and my professor to demonstrate the ways instructors can affect what kind of media their students make? My writing still follows many norms expected of a dissertation, but there is still deviation—and that deviation only exists because there is a norm that can be deviated *from*. However, I cannot imagine any other way of presenting this material besides the way I just did while staying true to the core values of my research, the people who have influenced my research, and the people that I hope to help with my research.

So, what *is* this chapter about?

In this chapter, I intend to develop a pedagogy of voice that uses interstices in broadcast media to accommodate a wider range of broadcasters than are traditionally and currently seen. To do this, I will examine the ways that Actual Play podcasts can be used as a model for considering more equitable means of producing podcasts and other forms broadcasts such as live radio. This is not to say that what works for podcasts would certainly work for live radio, but that there are enough similarities between the two genres that instructors and creators can adjust as necessary to apply to different forms of broadcast. The reason why Actual Play podcasts provide a model template for pivoting from traditional voice pedagogies is that they retain a large and dedicated audience despite often breaking the guidelines generally taught in broadcasting classes and because many of the showrunners embody different characters in their play and use their voices in different ways in the same episode, which provides a wide variety of practices that broadcasters can draw from to use in appropriate contexts. This is because the "play" aspect in Actual Play deviates from the single-person model of other podcast programming and allows the broadcaster to shape their voice as they want. Lastly,

Actual Play podcasts' formatting and production norms are different from most other subgenres of podcasts,[24] and their stark differences allow the opportunity for students to compare the interstices that allow these differences that may not be as viable in other genres of podcasts. This method would invite critical thinking and employing media literacy instead of focusing on a list of guidelines of how a voice should and should not sound when recording.

I begin the body of this chapter with an overview and analysis of how broadcast announcing is taught in colleges. Although I did not investigate how comic and video game composition are taught in my earlier chapters, it is necessary for me to do so here. For comics and video games, voice reproduction is an element in these genres but not central. In podcasts, it is an integral part of the genre, and therefore, I dedicate a significant portion of the chapter to current voice pedagogies and the issues that arise from these methods. Following that, I establish the conventions of the Actual Play subgenre and the ways that their listeners interact with the text. This section assists in demonstrating the different interstices and relationships between the audience and the text that can then serve as examples to question how other subgenres can change their composition practices to achieve similar outcomes with less strict expectations of an announcer's voice. This section uses concepts of "frontstage" and "backstage" behavior (discussed in detail later) to link Actual Play podcasts to other subgenres of podcasts as well as other broadcast genres. Finally, I examine specific examples of how three Actual Play podcasts break many traditional guidelines of broadcast pedagogies and

[24] Actual Play podcasts require spontaneous play and often are loosely-scripted at best, whereas other dramatical genres (True Crime, Radiodramas, Horror Stories, etc.) tend to be fully-scripted and often have actors record lines several times so editors can use the best "take" for the "cleanest" audio. Nondramatical genres (Sports, Talk Shows, etc.) can still be spontaneous, but each person typically only presents as themselves instead of as multiple characters.

expectations of what male and female voices "should" sound like. The interstices exposed through the breakages can then be applied to other subgenres as appropriate to question which guidelines serve the needs of the audiences versus which guidelines uphold hegemonic and limited expectations based on the sensibilities of the people and organizations in power.

The podcast genre is most closely related to radio broadcasting—its name comes from the merging of the words "iPod" and "Broadcast" (Hammersley), and the origins of podcasts as we know them come from the application *iPodder*, which allowed users to download radio broadcasts to their Apple iPods (Bishop). Scholars have suggested that podcasts "democratized" radio due to the low barriers of entry to become a podcaster, which aided the proliferation of the genre since its inception in 2004 (Schofield). However, just because podcasts democratized radio by broadcasting through the internet instead of radio waves does not mean that they are free from control. Galloway explains in his book *Protocol* that it is a misconception that the internet is "chaotic" instead of "highly controlled" and instead is a tension between decentralized power and rigid hierarchies (8). Referring to Gilles Deleuze's concept of decentralized "control societies," Galloway argues that "protocol is to control societies as the panopticon is to discipline societies" (13). What this means is that even though podcasters do not have to answer to a centralized power for the ability to broadcast, such as the Federal Communications Commission (FCC), there are still hierarchies and invisible structures that guide how people navigate, compose in, and share information in these spaces. These structures still affect their behaviors and provide an anchor point for those in power to enact their control across mediums. That is partly why podcasting—while democratized—is still laden with hegemonic practices as in other genres of broadcasting that have more centralized control.

Podcast audience has increased with each year since its inauguration, and as of 2021, 68% of Americans aged 12 or older have listened to a podcast (Pew Research). Edison Research Center found that as of 2021, approximately 80 million Americans are weekly podcast listeners, meaning almost one-third of the American population regularly consumes information within this genre. Despite the popularity of podcasts, text-based genres like books are still privileged forms of learning and composition, even though only 70% of Americans have read a book within the past year (Perrin). Because so many Americans regularly consume podcasts and other broadcast media, there is a clear reason why these genres should be taught, studied, and understood through a critical lens as much as literature is. In this chapter, "broadcast media" serves as an umbrella term for media productions that are recorded and distributed to mass audiences. The primary genres I analyze are live radio, live TV, and podcasts.

Podcasts have many subgenres, but I will focus specifically on Actual Play podcasts, which feature tabletop roleplaying (TTRPG) content that is "performed, recorded, and broadcast to audiences" (White 2019). These podcasts typically require little editing in comparison to other genres of audio media since the intent of Actual Play podcasts is to remediate the experience of playing a TTRPG to others who wish to observe the session. In other words, these podcasts are recorded sessions of people playing in primarily domestic spaces, and then those recordings are shared with an audience so that they feel they are "at the table" with the players. There are several reasons why Actual Play podcasts are ideal for analysis, but the most important one is that they exemplify the verisimilitude of conversation that broadcasting textbooks advise aspiring voice actors to achieve. While there is a fair amount of pre-production and various levels of post-production for Actual Play podcasts, the intent of

this subgenre is for the audience to feel like they are witnessing a syndication of live play very much how broadcasting textbooks advocate for voice actors to make their listeners feel like they are observing a conversation.

In the following sections, I will describe in detail the practices that are taught for "good voiceover work" to provide appropriate context that will demonstrate how Actual Play podcasts both break and adhere to many of these rules, just as Bill's advice had done for my friend and me. Then, I will explain the conventions of Actual Play podcasts and analyze some of the most-downloaded Actual Play podcasts, *The Adventure Zone, Critical Role,* and *Dungeons and Daddies.* Although not all Actual Play podcasts are *Dungeons and Dragons* podcasts like the ones listed, the most-downloaded Actual Play podcasts use the *Dungeons and Dragons 5th Edition* ruleset because this edition is germane to forming engaging narratives in podcast form. Because of podcasting's roots in traditional broadcast radio and its growth as a low-barrier form of entering professional broadcasting, it is appropriate to analyze how broadcast announcing is traditionally and currently taught because these practices carry over to podcasting. I use the Actual Play subgenre of broadcasting because of the interstices available[25] within the subgenre that contradict many of the traditional means of teaching broadcast announcing and provide the opportunity to analyze what is actually necessary for different audiences in different subgenres of broadcasting. These sorts of questions and analysis are beneficial to demonstrating the link between (sub)genres and audiences or (sub)genres and other rhetorical aspects of communication, such as modality, rhetorical appeals, and rhetorical situations.

[25] these interstices will be explained later in the chapter

Students' media literacy and rhetorical awareness will be developed as they discover the nuance between the way an Actual Play podcast typically is composed versus other subgenres such as Sports podcasts or True Crime podcasts.

Training the Voice and the Listener

Catherine Winter writes in her article "Learning to Do What Comes Naturally" that an unsatisfactory voice was a factor in nearly 85% of hiring and termination decisions in television and radio. In that same article, she reviews eighteen of the most popular textbooks taught in broadcasting courses in America. These textbooks were drawn from the *Broadcast Education Association's* syllabus project, which is meant to "take inventory of the pedagogical tools broadcast journalism professors have been employing in both radio and television news writing classes (135)." In this review, Winter found that six textbooks did not address practicing vocal delivery, three textbooks mention that delivery is important but do not offer advice on practices, and four textbooks do address vocal delivery but offer "erroneous advice or examples." Winter's intent in her review is to address the lack of information available for aspiring broadcasters and suggests an audience-based approach to delivering copy that stresses new information and contrasting information to be effective for their listeners. This methodology aligns with findings from Samantha Warhust et al.'s study, "Acoustic Characteristics of Male Commercial and Public Radio Broadcast Voices," which analyzes the characteristics of male voices in different realms of voiceover work. In this study, they found that "the commercial broadcasters' voice quality and physiology is more similar to that of actors rather than the public broadcasters and controls," most likely because of "the need to appeal to their audience of a younger demographic and produce voices that are intelligible and

distinct from the music they are announcing." In other words, Winter's advocacy for renewed methods of teaching vocal delivery centers on an audience-centered approach for purposes of intelligibility and engagement. Winter argues that in order to be a marketable talent in broadcasting, one must use their voice to deliver information that makes their audience want to listen and in a way that is memorable and intelligible, but this assumption does not necessarily provide a blueprint of what is a "good voice" beyond the audience-centered approach.

Textbooks designed specifically for practicing voiceover work go to great lengths to describe ideal qualities of voiceover artists, but the advice is often contradictory. For example, in *Broadcast Voice Performance,* Michael Keith advises that a "midwestern" voice "without accent" that is "medium baritone" range is ideal (31) but also that women's voices were the preferred sound for selling domestic goods (3). The authors of *The Announcer's Handbook* corroborate this idea by explaining that women's voices "lack the authority" to be ideal for news broadcasts but are "just right" for selling domestic goods (21). However, Keith also supports that "announcers shouldn't lower their voices unnaturally" (49), "if you can't speak effectively, you have no right opening the mic switch" (61), and that announcers should "lose any regionalisms, like the dropping of "r's" if you're from New England" (91) while simultaneously advocating that "making the most of what you have will bring out the qualities that will provide success" (61). The advice of "make the most of what you have" is not helpful or equitable when it requires the erasure of any identifying factors of their voice that transgresses the Midwest medium-baritone voice, especially when voice artists are told to erase their accents while not acknowledging that the Midwest accent is, in fact, *still an accent*.

This oversight can be understood through Roman Jakobson's theory of "markedness". He states that "every single constituent of a linguistic system is built on an opposition of two logical contradictories: the presence of an attribute ('markedness') in contraposition to its absence ('unmarkedness')." In these examples, the Midwest medium baritone voice is the "unmarked" voice because even though it is an accent within a certain frequency range just as any other voice exists with an accent and within a certain frequency range, it is considered the norm and any voices that deviate from it within broadcasts are exceptions to the norm. Marked voices then become ideal only when marketing towards similarly marked audiences, as can be seen in women being used to market items for other women or "regional" voices having authority in local broadcasts while being unfit for nationwide broadcasts.

While I am not here to argue that training one's voice is inherently an issue, there *are* problems that come with canonizing a small range of voice as the "ideal voice," especially when most of the population physically could never achieve such a voice. Women's voices become devalued (Dunn 1994), masculinity is challenged when a man's voice does not fall into the medium baritone range (Bloom 2007), and listeners make negative assumptions of a person's characteristics and integrity based on their voice if it is not within the ideal range (Kenny 1994; Mildorf 2015). There are also several other factors at stake, such as a person's disability, race, bilingualism, or access to extracurriculars and education. For example, different languages have different natural frequency ranges (Bernhardsson 2017)—meaning a person *may* be physically capable of comfortably speaking in the medium baritone range, but their language naturally falls in a higher range, and they are then judged by English pitch standards for a range that is perfectly normal and expected in the other language. Additionally, it is well-documented that

Americans perceive many foreign accents—especially those by nonwhite bilingual people—less favorably than those with the Midwest accent (Dragojevic 2020). Another example can be seen in sports broadcasting, which requires one of the most intensive background knowledge of the material out of most broadcasting subgenres (Keith 2022)—if certain demographics of people are precluded from participating in sports due to a variety barriers, such as race and gender discrimination, then they will lack the experience and knowledge expected of sports broadcasters who often are ex-athletes and ex-coaches. Out of the 331 million people who currently live in America, only 35 million are men who live in the Midwest. The other 296 million deserve more for their voices than being exceptions to the norm, especially when the norm reflects such a small percentage of the population.

Jenni Mills notes in her textbook, *Broadcast Voice Performance*, how women's voices in broadcasting have dropped in pitch consistently since the 1940s (83). The medium baritone expectation is so pervasive that she notes how some women have even been tempted to take testosterone to deepen their voices to be more marketable[26] (88). However, Mills' textbook provides one of the most open takes on practicing one's voice for broadcast performance. In the opening of her book, she recounts what a "good" broadcasting voice is. She says,

> A good voice is one that has an effect on us. It is something we can't ignore—we have to listen to it, it compels us in some way. We think of it as an expression of what we imagine to be the personality of the broadcaster and we respond to it (2).

[26] When I was going through my broadcasting degree while still presenting as female, I was told so often that if I wanted to do announcing, I would have to practice deepening my natural voice because it was so high. I often found myself yearning to take male hormones to help alleviate that problem but as life would have it, I was a closeted trans man and wanted male hormones for more reasons than just my voice.

In this definition, there is no mention of preferred accent or pitch and, instead, it focuses on what a voice can do for its audience. This definition affirms the arguments in Winter's analysis of broadcasting textbooks and Bill's advice to me and my class. Mills argues that "there is no bad voice, only people using their voices badly" (5). Ultimately, voice artists must contend with the fact that industry professionals can still name the Midwest medium baritone voice as the ideal and unmarked voice in media, but also that when listeners are asked to identify qualities of a broadcasting voice that they like, accent and pitch are not typically identified. Mills describes that in her broadcasting classes, she asks her students to list what they like in a broadcast voice. The following are the most common adjectives given by those students: Warm, Friendly, Conversational, Clear, Strong, Authoritative, Trustworthy, Real, and Relaxed (3). Although not everyone may possess all these qualities, far more of the population are able to achieve some or all these qualities than there are able to achieve Midwest medium baritone. Using these qualities as a guideline when practicing becoming a broadcaster is far more tenable than a litany of often contradictory do's and do not's that many traditional broadcasting textbooks offer.

Mills provides another useful perspective on pitch and authority that does not prioritize lower-frequency voices. Instead, she suggests that vocal artists monitor why their voice is fluctuating to a higher pitch within their natural vocal range. She states that true authority comes from "knowing what you are talking about" (64) and explains that a lack of confidence in the subject matter can cause the body to tense. This tension results in muscles making breathing more difficult, which then limits the space and airflow for their bodies' natural resonators, and that causes a higher pitch. Here, she notes that listeners will question a

speaker's authority and confidence if the voice suddenly becomes higher-pitched and tense, not because of whether their voice is masculine or feminine, but because their intuition senses that something is "off." While this approach is helpful for higher-voiced people, there remains the issue that some people with disabilities speak with a body that constantly operates with tense, creaky voices. For example, people with Cerebral Palsy speak with "creaky" and "strained" voices (Nordberg 2014) due to having less control over their vocal folds than those without Cerebral Palsy (Nip 2021). Mills' advice of "know what you're talking about" in order to keep stress low and muscles relaxed does not help when someone's body cannot be controlled enough to regularly produce relaxed speech, but it *is* useful when coupled with broadcasting techniques to establish personality and performance styles.

Although broadcasting requires performance, it is more common to call professionals in TV and Radio "personalities" over "performers." Their personality is cultivated in part through their performance on-air, but much more is required to fully realize an engaging personality. Mike Cunsolo, a podcaster and talent acquisitionist, advises that developing a radio personality requires attending community events, sharing aspects of one's life on-air, and addressing the audience in a way that makes them feel special (Cunsolo 2022). Glenn Halbrooks, a TV news director, suggests similar strategies in addition to making one's face known by attending and hosting community-focused events (Halbrooks 2020). They argue that developing their personality beyond mere reporting makes the audience feel heard, respected, and engaged with the person behind the microphone. The increased engagement will subsequently result in

more knowledge[27] of the on-air personality, and their likeability now relies on more than just their voice and how they present information on the air. A listener can then forego their usual conclusion that a person is talking with a higher pitch because they are stressed or unprepared if they listen and interact with the personality long enough to understand that their voice is the way it is due to a disability and is therefore not a reflection of their preparedness. However, engaging with the personality's content also allows listeners to turn radio into what Rudine Sims Bishop describes as "mirrors, windows, and sliding glass doors." Bishop's foundational essay describes fictional work as mirrors where people can see themselves reflected in the narrative, and windows they can look through to witness experiences other than their own. These windows can double as sliding glass doors should the person wish to participate in something new to them. Though Bishop intended this metaphor to be applied towards fiction books, it is still useful in this case because broadcasting, like reading books, is a form of entertainment. Listeners who encounter a personality with experiences different from theirs can learn and understand the experience that brought them and their voice to where they are now or see themselves reflected in the personality whose experiences or voice has similar characteristics. This is because a voice is never *just* a voice, but a result of many physical, cultural, emotional, and geographical influences.

Michel Chion describes this phenomenon as *mise-en-corps,* a play on the term *mise-en-scène,* which is the arrangement of elements in front of a camera for film. Mise-en-corps, however, refers to the relationship of elements between the voice and the body. When

[27] obligatory acknowledgement of the precarity of parasocial relationships

encountering a voice, the listener also encounters elements such as height, gender, muscle mass, vocabulary, and a myriad of other aural and visual elements that compose the body and the voice that body produces. These elements "set the stage" for what Chion describes as *désacousmatisation,* which is the semiotic process where listeners see the body that produces the voice that they hear (32). This can then result in subverted expectations and the realization that some of their assumptions of the person producing the voice are incorrect. For example, a masculine and booming voice may be assumed to belong to a tall, muscular man, but the speaker may be instead short and rotund. Alternatively, someone may assume that they are listening to someone of Asian ethnicity if they hear someone speaking English in a Korean accent, but the speaker may be white yet born in Korea. Gill Branston writes that "the voice is geographically and culturally formed" and "when a speaking voice is at stake, in a language and vocabulary we inhabit, the histories of class, gender, and region seem much clearer" (40), showing that mise-en-corps goes beyond the relationship of the aural and the visual. Listeners' assumptions are formed through the repetition of mises-en-corps that ultimately forms a canon of which voices belong where and to whose bodies. Midwestern-accented voices appear "normal" on white bodies but are sometimes viewed as an "exception" to Black bodies since Black bodies are more expected to use accents associated with Black English/African American English (Kurinec 2021; McWhorter 2016). As listeners parse through the *désacousmatisation* of the voice, they are also deconstructing how language, class, history, geography, and gender affect the voice—and if encouraged and taught to deconstruct deeper, they can then dissect the hegemony that formed a canon of the small range of "acceptable" voices for broadcast even though people interact with and enjoy the conversation with many people whose voices

do not fit that canon. Actual Play podcasts complicate the process of *désacousmatisation* because the presenters embody multiple personalities within the same session. Many play at least two roles—themselves and their characters—and they very rarely have a body type for their character that is exact to their real, physical body. They often use character voices to differentiate when they are speaking as themselves versus their character, but ultimately the voice that represents multiple bodies only comes out of one physical form.

Although podcasting is a genre that typically does not put the personalities in view of the audience, Actual Play podcasts require participants to give vivid descriptions of their characters. Podcasters in Actual Play podcasts simultaneously fill several roles I will describe in detail shortly, but a major role they fill is a player. In these episodes, they play fictional characters that often are wildly different from how they look. In *The Adventure Zone,* six-foot-tall Clint McElroy plays a 3’6" muscular dwarf while his 5’7" paunchy son Justin McElroy plays a lithe elf that stands over six feet tall. There are many other physical characteristics that differ between player and character, and they often must describe the character’s attire while playing so the listener can envision the character they play. The players often use different voices for their characters than their regular speaking voices, so listeners often can assemble the mise-en-corps of the characters even if they may not envision what the players look like. Furthermore, character voices do not have to adhere to typical broadcast "rules," which allows for a wider range of voices to be heard in this subgenre of podcasting. Of course, I am not arguing that news broadcasters should put on silly goblin-esque voices when delivering the traffic update, but because Actual Play podcasts have millions of listeners consuming hundreds of hours of content, then it is a reasonable argument to make that the Midwest medium baritone voice is a

hegemonic norm that can be laid to rest because people are actively engaged in content where few to none of the players/characters fall in that category. In the following section, I will expand on the multiple roles that Actual Play podcasters fill in their episodes and how they can be used to make space for a wider range of voices behind the microphone.

Actual Play and Actual Voices

In the past decade, the *Dungeons and Dragons* Actual Play podcast genre has seen an increase in popularity and profit. Some of these podcasts, such as *The Adventure Zone, Not Another D&D Podcast, Critical Role,* and *Dungeons and Daddies,* have tens of millions of downloads apiece, and the creators are paid to play in front of a live audience, which helps grow the segment's popularity. *Dungeons and Dragons* is a fantasy-based tabletop roleplaying game system that was first published in 1974. Since its inception, it has received multiple rounds of revisions to the rules and gameplay, which are referred to as "editions." These editions are not just minor revisions and patches to work out buggy mechanics but are overhauls to the system. Editions can add or take away entire mechanics, available classes, races, weapons, and spells. Although earlier versions are still available for play, many of the highest-downloaded Actual Play podcasts use the most recent edition. It can be argued that the reason for this choice is that the rules in *5th Edition* allow for more narrative freedom as compared to its earlier iterations and other game systems, which leads to more dramatic content to engage viewers. This is not to claim that earlier editions and other systems are not engaging, but that "crunchy" systems are less popular in the Actual Play subgenre. The roleplaying game community uses the term "fluff" and "crunch" to describe games that focus more on roleplay/narrative (fluff) or on the mechanics of play (crunch). Both kinds of play have the potential to entertain those at the

table, but "crunchy" campaigns often have fewer downloads, and in the Actual Play podcasts that *do* rise to fame, the "crunch" is often edited out for the podcast audience even though those at the table may or may not have enjoyed it. However, there are many popular talk show podcasts that do well discussing "crunch" in games.[28]

The participants at a *D&D* table consist of the Dungeon Master (DM) and the players. There can be as little as one player, and there is no official upper limit to how many people can play at a time, but many tables have three to six players. Players roleplay as their player characters (PCs), while the Dungeon Master will play non player characters (NPCs), monsters, creatures, and every other part of the campaign world with which the players interact. The DM and players do not have to use accents or voices, but they do have to distinguish what is "in character" from what is "above table" in order to mediate information and experiences. In player's parlance, "above table" means that it is the players talking and not the character, allowing players to discuss metagame elements and ask clarification questions without worrying about repercussions to their characters. This is so that the DM and players can react accordingly. If a player says a flippant comment that could incite a fight, it is important to distinguish that the comment was made above table so combat is not initiated within the game. Talking above table also is used to explain a character's in-game decision or motivation to help the DM respond accordingly to the choice made.

The context above does not express the depth of knowledge players and DMs must have to run a seamless *D&D* session because these observations do not speak to the thousands

[28] The term "crunch" comes from "number crunching", and listening to players do math often is considered not engaging for the listeners by Actual Play podcast creators. The opposite term, "fluff", refers to experiential context.

of pages' worth of rules, spells, locations, and statistical blocks in the *Dungeon Master's Guide, Player's Handbook,* and the *Monster Manual,* which are the three core books of the *D&D 5e* ruleset. In addition to these books, there are 55 sourcebooks including even more rules, spells, monsters, magic items, and modules for gameplay—each book ranging from 200-400 pages. As much as *D&D 5e* is claimed to be a "beginner friendly" and "not crunchy" system in the TTRPG community, there is a mountain of knowledge capital for players and DMs to master. In the face of this challenge, Actual Play podcasts have helped bridge the knowledge gap between newbies and hobbyists. In a 2017 interview, the senior director of the *D&D* franchise said that "Over half of the new people who started playing Fifth Edition got into *D&D* through watching people play online" (DeVille), and the Hasbro CEO[29] observed in 2020 that "over 150 million hours of content has been viewed on Twitch and YouTube, which is up nearly 50% year-on-year" (Whitten). Another study surveyed 1,500 *D&D* podcast listeners on Reddit and found that 50% of the participants started playing because of Actual Play podcasts (Stanton 2021). Although Actual Play podcasts provide entertainment, they double as a means for new players to learn the hobby. Through the millions of hours of content, new players form a habitus of what playing *D&D* is like, what the rules are, and how to navigate common conflicts that happen at the table. This habitus is similar to how those who consume other broadcast media develop a sense of what the conventions of the genre are and what effective broadcasters are. However, unlike traditional broadcasting that was[30] dominated by able-bodied white men with

[29] Hasbro owns part of the intellectual property of *Dungeons and Dragons*
[30] and often, still is.

a specific accent, Actual Play podcasts have a more diverse demographic since many are not professional entities, but hobbyists sharing their content for little to no financial gain.

Additionally, Actual Play podcasts require a similar level of performance that live broadcasts emulate. The "Matt Mercer Effect" is a common term in the TTRPG community, named after *Critical Role's* DM, Matthew Mercer, who is a professional voice actor and runs *D&D* games professionally with the assistance of a production team, editors, and other employees on-hand to assist with making props, checking rules on-air, and performing other minor tasks during the session so Mercer can focus on running the game. Most DMs do not have access to a fraction of Mercer's resources, but because so many new players' first contact with *D&D* is through *Critical Role,* they expect their campaign to feel like a Mercer-level show. This phenomenon is typical for media figures. Nick Couldry writes in *The Place of Media Power* that "media people are somehow special. This is not based either on fact or on a cultural universal, but rather is a form of consciousness ultimately derived from a particular concentration of symbolic power" (45). Because *Critical Role* is a public podcast where the players hold both social and monetary capital as professional *D&D* players and voice actors, listeners subsequently place themselves in a hierarchy where *Critical Role* is a standard, and the listeners should aspire to similar depth and engagement at their own games. However, Actual Play podcasts are as realistic a mediation to playing games in a domestic environment as broadcast speaking is to speaking in nonprofessional contexts. Both are performative, curated, and presented in a way that presents a specific version of the speaker(s).

The curation of performance manifests in both overt conversations and subtle, unspoken choices. For example, the showrunners of *The Adventure Zone* admit that they re-

recorded the resolution to their campaign to be different from the original ending that organically came about through gameplay because they did not believe the tone of the ending was the tone they wanted in the show (*The Adventure Zone* ep.70, 1:16:20). The lead showrunner, Griffin McElroy, explains that most of his edits are breaks in which participants check rules, do math, crosstalk, or produce unwanted noise. However, these overt choices do not cover the subtle ways that playing for podcasting changes the nature of gameplay. For example, side chatter, eating snacks, and making other distractive noises are permissible in a non-broadcasted game, but a DM will have to caution their players preemptively not to make these noises since it would make the audio unusable or in need of heavy manipulation. DMs must contend with potential audience response to rulings—it no longer is a negotiation between DM and player, but DM-player-audience as they decide to "stick to the rules" so that listeners do not get frustrated over the rules being thrown away or to permit an exception because the result would make for entertaining storytelling for the audience. Gaming podcaster Gregory Avery-Weir explains that "Actual play podcasts seek to provide listeners with an experience that *evokes* actual play, not one which documents it," which further demonstrates Actual Play's similarities to broadcast media because it *evokes* play to the listener. Actual Play podcasts are the hypomediation of play for the listener, just like how live television and radio announcers hypomediate conversation to the viewer. In neither case can the listener/viewer talk back to the announcer, but the announcer still evokes the feeling of being part of a natural conversation even though the announcer is performing conversation instead of engaging in conversation.

Another way to consider Actual Play in relation to other broadcast media is that it remediates gameplay. Jay Bolter and Richard Grusin write in *Remediation* that "the digital medium wants to erase itself, so that the viewer stands in the same relationship to the content as she would if she were confronting the original medium" (45). Actual Play podcasts and other broadcast media evoke their audience's senses to feel like they are experiencing the original medium, even when they are experiencing a remediation of the original medium. In Actual Play podcasts, listeners are meant to feel like they are either at the table with the podcasters or listening to a "real" game of *D&D* "as it is naturally played," and in other broadcast media, the audience is meant to feel like they are not being read to even though many broadcasters deliver information to the audience by reading a script or teleprompter. By using Actual Play podcasts to reveal that these podcasts are not *truly* actual play and therefore create an artificial set of expectations of what play is like, educators can then have students analyze other broadcast media to consider what contrived expectations exist in other genres. Lastly, because Actual Play podcasts have every person at the table using at least two voices—and sometimes the different voices do not follow the traditions of "proper" broadcast speaking—we can observe which "best practices" for voice acting are malleable in different contexts and begin to push the boundaries of what is *necessary* in a broadcast voice versus what is a norm constructed through aesthetics rooted in inequality.

I am not trying to argue that every aspect of how voice is taught in broadcasting must be changed, but that room *must* be made *somehow* in order to prevent unnecessary and inaccurate assumptions being made about groups of people not traditionally shown in broadcast media who are excluded based on sensibilities instead of an aggregate set of

standards, as shown by Catherine Winter's analysis of broadcasting textbooks. Although I go into more detail later, what is taught in media courses still has an impact on other courses such as FYC curricula because when students are taught and asked to analyze texts, their analysis is in part shaped by what they know and consider "normal" or "correct." If an announcer's information is credible in all other manners except with the quality of their voice, their perceived ethos may suffer. Therefore, in order to resist kneejerk conclusions, students must be encouraged to question what these "best practices" implicate about the dissemination of information and how it is received by the listeners when someone's voice deviates from these "best practices." Instead of being limited by what historically is claimed to work best, students can look at what affordances the genre has and what interstices exist that can be explored in meaningful ways. Broadcasters are the vocal equivalent of traditional models—between audio editing software, innate vocal qualities, and time spent training their voice, the average broadcaster rarely sounds like the average person. Similarly, models traditionally conform to dominant beauty standards, and promotional materials regularly manipulate the raw photos to the point where not even the model has the body that the picture of them portrays. Lately, there has been a shift to include a wider range of bodies in modeling, and broadcasting can undergo a similar decentralization of the canon of "acceptable" voices.

Performance, Podcasts, and Broadcasts

Many scholars who study Actual Play are quick to note that Actual Play is not *actual play* but performed play. Tabletop scholars Daniel Waskul and Matt Lust explain that TTRPGs require a person to inhabit three roles: the person, the player, and the persona—however, subsequent scholars who observed TTRPGs in the context of broadcasting concur that the players also

inhabit the fourth role of "the performer." Using theories of play and performance, they examine how spectators inherently change the act of playing and how play is done moving forward. Although this has been the primary model of analyzing Actual Play and its function for the listeners, it is less helpful when thinking about how podcasts can be used as a model for teaching broadcast vocal practices. Instead, I suggest considering Erving Goffman's theory of *frontstage* and *backstage* behaviors, which I will explain in the following paragraph. Additionally, I will explain how frontstage and backstage behaviors are also reflected in other broadcast media. It is also important to note that not all Actual Play shows present live play. *Dungeons and Daddies* and *The Adventure Zone* are recorded in privacy and later edited and uploaded for the audience, whereas *Critical Role* plays live over *Twitch.tv* with audio subsequently uploaded to podcast sites with very little editing. Although live play presents different considerations than studio recordings, and those differences are worth examining, this dissertation focuses on the asynchronous aspect of the podcasts and will only examine *Critical Role* in its podcast format and not the livestream.

In *The Presentation of Self in Everyday Life,* Goffman explains that people are performers and construct their identities through different social performances. He also differentiates performed behavior between *frontstage* and *backstage.* In frontstage behavior, the person is public-facing and upholds the expectations of the social rules surrounding the scenario. Goffman describes backstage behavior as informal, sloppy, and other actions that occur when either no one else is around or those that are around are "in the know" in the backstage behavior. Frontstage and backstage behaviors can be associated with certain spaces—for example, an employee will exhibit frontstage behavior when they are on the sales

floor with a customer but then backstage behavior in the employees-only break room. However, Goffman notes some difficulties with space and place with backstage behavior with several examples, including in the case of broadcasting. He explains,

> In these situations, back region tends to be defined as all places where the camera is not focused at the moment or all places out of range of "live" microphones. Thus an announcer may hold the sponsor's product up at arm's length in front of the camera while he holds his nose with his other hand, his face being out of the picture, as a way of joking with his teammates. Professionals, of course, tell many exemplary tales of how persons who thought they were backstage were in fact on the air and how this backstage conduct discredited the definition of the situation being maintained on the air. For technical reasons, then, the walls that broadcasters have to hide behind can be very treacherous, tending to fall at the flick of a switch or a turn of the camera (73).

Although space and place *can* guide decisions on front and backstage behavior, it is ultimately up to the performers which kind of behavior they would like to enact. Regulated broadcast media such as television and radio must adhere to a stricter set of standards of "appropriate" frontstage behavior in comparison to podcasts. If a station aired a program that included excessive swearing in violation of the Federal Communications Commission's (FCC) standards, they might risk hefty fines and the loss of their license. However, backstage behavior is not limited to crudeness and unprofessionalism that could risk legal action. Backstage behavior could include a news anchor telling their coworker that they cannot wait to get home and have dinner. This self-involvement, as Goffman explains, is covered under backstage behavior (78), but what if this is also an anchor attempting to be relatable to their audience and they are

performing as Cunsolo and Halbrooks suggest, along with many other broadcasting textbooks? The anchor may be entirely genuine in their tale of wanting to go home but also chose to exhibit "backstage behavior" for the sake of developing their personality to their audience. Ultimately, this act would be considered frontstage behavior since it is still performative for the audience, but it is important to question where these boundaries are drawn and how these boundaries serve the audience.

In the case of *Critical Role,* even while the actors are performing frontstage behavior, there are times when backstage *activity* happens simultaneously. Backstage behavior differentiates from backstage activity because one can perform frontstage behavior while completing backstage activity. For example, in many productions, staging and pre-production are integral to running a show effectively, and if the pre-production work becomes visible to the viewer during production, it is considered a blooper or faux-pas—such as a teleprompter not scrolling at the appropriate speed, resulting in the anchor having difficulty delivering the information. The backstage activity would be the audience being aware of the issue that needs fixing, while frontstage behavior would be the anchor trying to remain professional despite the error. Backstage behavior, instead, may include the anchor swearing at the machine for not working properly. One aspect of Actual Play podcasts that appeals to listeners is the amount of backstage behavior that remains in the episodes that allows them to understand the mechanics of the game better. *CR's* podcast does not edit out the stretches of conversation when players discuss rulings that would fall under pre-production knowledge, since the rules *should* be known by the players prior to playing. It does not edit out the transitions between notes the DM has or players asking for a moment of patience as they check what their character's spells

do before deciding how to act in-character. These moments of "sloppiness" that would typically not be seen in frontstage behavior help reveal the artifice of performance and how much pre-production and knowledge is necessary to make the game run. Scholars have documented that Actual Play podcasts introduce listeners to TTRPGs and how to play them (DeVille 2017; Yeates 2020, Burton 2021). As part of their educational function, these podcasts reveal what is usually hidden through pre- and post-production: backstage activity.

When both backstage activity and behavior are hidden from the listener, the frontstage performance becomes reality—albeit a curated one. When players find their games deviating from the way podcasts play, they may encounter "The Mercer Effect" in similar ways that consumers of other media may feel negatively about themselves when they do not have the same experience as the curated "realities" presented by media makers. Researchers have already proven that Photoshopped images cause negative responses in people's self-image of their body (Grabe 2008; Levine 2011), so it is reasonable to question the effect on people's self-image of their voice when frontstage performance is almost exclusively used in the media they consume. Drawing back the proverbial curtain and revealing how the metaphorical sausage is made gives listeners the opportunity to see past the artifice and the performance. Through this process, they can see some of the frameworks that guides frontstage behavior and activity and can choose how they wish to embrace the curated reality of the performance rather than not be at the table at all and are forced to only be able to speculate how much of the performance

is curated, and how. In other words, they can be afforded to determine what is performance and what is "really real."[31]

This opportunity is important because when the frameworks are challenged, then conversations about what is *truly* necessary in performance can be held. Which practices are to ensure audience engagement versus which practices uphold hegemonic norms? What negative and positive effects do these frameworks have on the audience and those they interact with? As the framework is renegotiated through different lenses and modes of performance are questioned, new opportunities to compose within the medium can arise without the need to change much—if any—of the genre's form. As Sousanis describes in *Unflattening,* one of the biggest dangers to knowledge and analysis is the chorus of "this is how it is" (7) that arises when someone questions a norm. The resulting opportunities for more people to participate in creating mass-broadcasted media can then expose viewers and listeners to professionals beyond those who fit the Midwest medium-baritone expectation and become a point of familiarity for those who otherwise may not have encountered a person from that demographic.

Many sociologists have studied how people react more positively to things that are familiar to them. Gustav Fechner first explored this effect in the 1870s by observing how people responded to familiar things (Titchener), but it is Robert Zajonc who is best known for developing the modern understanding of the "mere exposure effect" in the 1960s-1980s. He conducted a series of experiments across different populations and species to observe how

[31] As defined by Geertz (1973) and Malaby (2022)

people form preferences and make decisions. The conclusion of these experimental variations is that participants have affective reactions to stimuli, make decisions based on the stimuli, and later seek to rationalize their decisions (Zajonc 1980, 171). For example, if someone only encounters a certain kind of voice and mise-en-corps in broadcast media and then sees one show with someone who does not fit that norm, they may have an affective response that causes them to view this speaker less favorably than the others because their speaking and performance are different from what they are familiar with. Then they may subsequently rationalize their negative view of this person because their voice is "different" and they are not "talking how the others do," and therefore, they do not belong. The blame is put on the speaker for breaking what is viewed as familiar and "normal" instead of the framework that excludes most of the speaking population. The representation of different voices in a credible space, such as broadcast and other professional forms of media, attaches the voice to being credible and worthy enough to appear in that space. Lastly, it exposes the viewer to other kinds of voices that are shaped by different cultures, geographical influences, and abilities, which subsequently provides the opportunity for the viewer to confront their own habitus and understanding of the "really real"... just as readers of *Hawkeye* #19 are confronted with navigating the world through a deaf person's perspective or players of *Missing Memories* and *Binary Distortion* are confronted with dysphoria when they may not have experienced it before. In my next section, I will show how mere exposure has worked in the *D&D* community as Actual Play podcasts cast players and characters that deviate from the traditional norms of a *D&D* table, which changed the nature of conversations about gender and voices at the table.

Gendered Voices

Traditionally, *D&D* is perceived as a male-gendered pastime involving white-coded, able-bodied fictional characters. However, there is more visibility now than before for people and characters that do not fit the labels of white, cisgender, able-bodied, and male. *D&D* has always had players with identities beyond white, able-bodied men, but their presence at the table is becoming more normalized as more people play and produce content within the hobby. While it used to be a topic for debate whether players should play characters of a different gender as it would be "unrealistic" to have someone that does not look or sound like the gender they are portraying, players now play characters of any gender with little resistance at many tables. Three of the most popular Actual Play podcasts include players acting as characters with a gender different from their own. *Dungeons and Daddies* has Beth May (she/her) playing Ron Stampler (he/him), *Critical Role's* Sam Riegel (he/him) plays Nott the Brave (she/her) and F.C.G. (he/they), and *The Adventure Zone's* Travis McElroy (he/him) plays Aubrey Little (she/her).

In *Dungeons and Daddies,* Anthony Burch leads a table with four players who play modern-day dads who are magically sent into the *D&D* world. One player, Beth May, plays the emotionally unavailable stepfather Ron Stampler and adjusts her voice to speak in a lower register and with vocal fry[32] to embody her character. Throughout the podcast, she switches between her regular speaking voice and in-character voice, and none of the players question Ron's voice or accuse it of being "too feminine." Additionally, the players at the table primarily use he/him pronouns when referring to Ron and she/her pronouns for Beth, though there is

[32] "Vocal Fry" is a term used for a voice that is low-pitched and has creaking sounds. It is considered an "undesirable" way of announcing due to the rough timbre and myths that it damages one's vocal folds.

some overlap and switching when the players blur the lines between in-character and metagame talking. The other players do not adjust the pitch of their voice as drastically as May does, but Will Campos speaks in a slightly higher tone due to the stressed nature of his character, Henry Oak. Instead, the men of the show differentiate in-character and out-of-character by how they act and whom they address. For example, if they are engaged in conversation with another character, it is assumed that they are speaking in character. However, if they address another player or speak in a way that reflects their "real life" selves and not the personalities of their characters, it is assumed that they are out-of-character. The amount of effort May exerts in her character voice is playfully teased in the podcast when Burch notes that May bragged in an unaired conversation about how manly her voice is as Ron and how she wondered if people would question if there really was a woman among the players. The other players joined Burch in laughing at May's optimism, subtly expressing that May's voice was still markedly feminine, even with the lowering of her pitch (Episode 3). The jabbing continued in the fourth episode when one of the players jokingly commented, "where did she go?" when May switched between her voice and Ron's voice, and that "it's like Ron is here with us" (Episode 4).

Because two of the players do not provide much variance between their natural voice and character voice, they are more likely to be asked clarifying questions to determine if what they said was in-character or not, whereas the line is more distinguished for May and Campos. In this context, it is not confusing that Ron Stampler has a voice that falls in the androgynous-feminine frequency, because it is markedly different from May's much higher, more feminine speaking voice. This complicates the way that gendered voices are traditionally perceived

where one's masculinity and femininity is tied to their vocal qualities (Bloom 2007). Ron Stampler is not treated as "less masculine" by the other characters due to his voice, nor is May's femininity called into question when she uses her "Ron Voice." Karen Collins writes in *Playing with Sound* that with roleplaying, there is often criticism when the voice does not seem to fit the character and this dissonance can affect immersion into gameplay (82), and players must contend with the social baggage that comes with the perceived gender and ethnicity of their voice (81). This holds true to an extent because there are certainly some circles of listeners that maintain that the voices should sound "realistic" to the character. However, given the popularity of the podcast and the surplus of fan-made art and merchandise featuring Ron Stampler, it is clear that there are those who find immersion through means other than the "accuracy" of a woman sounding mannish or vice versa. Chion's *désacousmatisation* is also troubled in the case of an Actual Play podcast because the characters are described, whereas the physical characteristics of the people playing them rarely are. Therefore, only part of the speaker's identity—their fantasy character—is désacousmaticized unless the listener reviews pictures and videos of the player to couple their "real" voice to their "real world" identity. Ultimately, this complication reveals an interstice where we can challenge why the same body's voice is appropriate for one identity but not another.

Another example of the complication of *désacousmatisation* is Justin McElroy's portrayal of Taako in *The Adventure Zone.* Taako is a fictional gay elf wizard whose voice is an impersonation of McElroy's childhood friend. However, the DM Griffin McElroy hesitated to allow Taako's sexuality be visible earlier in the show because Justin's voice for the character is

effeminate and would evoke a stereotype of gay men. They discuss the dilemma in their talk show, *The The Adventure Zone Zone.*[33]

> **Justin**: So my friend Micheal Beck is Taako, or his voice is Taako, basically i'm doing Michael Beck's voice for Taako.
>
> **Griffin**: Sorry, this is an amazing revelation for me! And I imagine for the audience too
>
> […]
>
> **Justin**: Griffin made the point that like... "Hey that backstory combined with the voice you are doing makes it seem like you are doing like a stereotypically effeminate gay character," which didn't occur to me because--
>
> **Griffin**: You were just thinking "I'm doing Michael Beck's fun voice"
>
> **Justin**: I'm just doing Michael Beck's fun voice, who is not a gay fella, so it did not occur to me that the two combined like... oh I could see where he was coming from.

When the effeminate voice is partnered with a body that belonged to someone who does not identify as gay, it is less likely to be seen as offensive than when the effeminate voice belongs to a gay character created by a nongay person. Additionally, the McElroys note that it is not the voice alone that is the problem, but the coupling of voice to body. As the voice is désacousmaticized and attached to a mise-en-corps of a gay character, that connection is now burdened by the histories of queer representation and oppression where many gay men have been victims of hate crime because of their perceived femininity (Owuamalam 2021). Justin did

[33] Yes, it is really called that.

eventually adjust his voice for Taako—not to un-feminize his character's voice, but as a natural progression of becoming familiar with one's character. Often, accents and voices used for characters in the first episode versus later episodes are not the same since players discover what is tenable across hundreds of hours of gameplay without aggravating their voices. Two prominent examples of this can be seen in *TAZ's* third campaign, where Justin plays a character with a bass voice, and in *CR's* second campaign where Sam Riegel plays a character with a high, scratchy voice. Riegel joked in the first episode that he was going to keep up the cockney-accented, scratchy voice for the next few years, but within several episodes, he adjusted the voice to something that is easier to maintain.

The examples above provide models for understanding voice performances that do not comply with dominant expectations of voice-to-body matches but provide engaging entertainment. Additionally, the podcasters adjust their character voices not to realistically comply with what male or female people traditionally sound like, but to have a natural and healthy voice since they perform the characters for hundreds of hours' worth of gameplay. This most directly links to Mills' advice to speak in a relaxed manner that does not cause the muscles to tense. Listeners can observe the mise-en-corps of the characters and their voices in comparison to the speaking voice of the player who plays them and note the different ways their voices are used to perform different aspects of the podcast and understand that their authority comes from far more than just how well their voice conforms to what is the traditional broadcast voice. Instead, there is a multitude of factors that allow a player and their character to be effective communicators through their voice, and they do not have to belong to

a specific group such as white, able-bodied, male, or upper-class to have a seat at the broadcasting table.

Although not every subgenre of podcasts allows for the voice to be used in exaggerated ways, such as when Actual Play presenters play fantasy characters and fantasy races like orcs, dwarves, and elves, just the mere interstice of having the freedom to experiment with different personalities mid-broadcast allows teachers to question current pedagogy. Although FYC teachers typically do not teach broadcasting, there is a shift to encourage students to compose in and conduct research using more genres than academic papers and articles. If students and teachers perpetuate myths of associating "bad speaking" with an uncredible author, then this will create a barrier between the student and accessing credible information by voices that do not conform to the narrow definition of what a "good" voice is. Broadcasters are already encouraged to straddle the line between being a personality while also being personable, so it is not too far of a stretch to use the interstice in Actual Play podcasts to question how much of a broadcaster's voice *must* be performed versus what can be their own. It is already acceptable and encouraged for broadcasters with thick regional accents to find positions on local stations, so why is it taboo for someone with a thick regional accent to keep that accent when presenting for national or international audiences so long as they are still understandable? This interstice is only one example of many that can be drawn from Actual Play podcasts to reconsider how the voice is trained to present and what conclusions audiences draw on voices that don't fit the narrow box that voices are trained to fit into in broadcast media.

Rules as Written vs Rules as Intended

In *D&D,* a common issue DMs encounter is refereeing rules. Although the rules set is fairly comprehensive, there are times when a DM must make a judgement where there is no precedent given in the game system, or they encounter two rules that contradict one another. One of the ways the DM may decide is by choosing between Rules as Written (RAW) or Rules as Intended (RAI). In this decision, the DM can either follow the rules to the letter as written in the book, or they can look at the rules and attempt to understand what the writer intended the limits of this rule to be. While DMs may favor RAW over RAI or vice versa, it is common that DMs employ a combination of both methods. However, this framework can be a useful metaphor when considering broadcast textbooks' guidelines for being an effective voice actor on air. As demonstrated by the conflicting advice given in the sampling of broadcast textbooks above and by the *Broadcast Education Association's* syllabus project, it is impossible to have a single set of broadcasting expectations for vocal artists that would universally appeal to all audiences in all contexts. The metaphorical "rules as written" in these textbooks are incomplete, so a useful alternative may be the "rules as intended."

Audience-centered approaches to broadcasting go beyond the duties of the person behind the microphone but depend on whether a station has the authority to air programming to the public. The Federal Communications Commission is the primary regulatory agency in the United States for public broadcasting and has the authority to grant and revoke licenses to public broadcasting. One of the most important tenets—and what is required by law—for acquiring a license through the FCC is to operate in "the public interest, convenience, and necessity." Instead of imagining a limited canon of voices that are "acceptable," it is more

pragmatic to consider what the voice needs to do rhetorically—what functions must it serve, what does the audience need, and how can authority be constructed through the voice to serve its functions for its audience. Because contexts change from program to program and genre-to-genre, vocal performance in podcasts and broadcasts is not a one-size-fits-all practice, and so it cannot be taught in such a way. Canonizing a limited kind of voice limits not just who is invited to the broadcasting table but the efficacy of who is already at the table. If too much value is placed on the performance of a certain kind of speech, the performer may miss out on or not consider other modes of delivery that would be more beneficial to their audience.

Furthermore, it is ineffective to attempt to classify what a "good" voice is through traditional paradigms. As stated above, what works in one context does not work for another. A "good" voice for a national broadcast means nothing to those that do not share the language or can even be perceived as not authoritative or credible to listeners in a community that the speaker has never had contact with. Last, because of the capricious nature of the body and voice, teaching a specific kind of voice is not helpful. A "good" speaker may encounter health or other issues that affect how their voice functions and will then be forced to perform frontstage behavior to feign wellness even when they or not. This perpetuates the myth of the "larger than life" media figure (Couldry) that does not follow the same rules and expectations in a viewer's mind as an average person does. This leads to harmful expectations where the performer must then feign wellness and perform to the expectations as if their body is healthy when it is not equipped to do so in that moment. Gina Bloom writes,

> If one repeatedly strikes a bell made, say, of bronze or tin with the same force, in exactly the same place, and using the same baton, the bell will produce the same sound each

> time. The human body, however, is not so predictable. If the vocal cords or larynx have developed even minor irritations, the voice can emerge hoarse or raspy (29).

Although most people have control over many aspects of their voice, they cannot control *all* aspects of their voice, and it is simply untenable to expect someone to consistently model their voice the same way, even if it *were* an effective way to communicate across all contexts. Because many Actual Play podcasts are also livestreamed over platforms such as *Twitch,* viewers can see backstage behavior such as sickness and how players navigate real-life events such as sickness, absence, confusion, or just simply having a bad day while attempting to perform a broadcast.

Actual Play podcasts demonstrate a framework that allows listeners and media creators to examine their biases, how mise-en-corps affects their perceptions and framing of the voice, and question which vocal practice rules are necessary versus mutable. Additionally, instructors can use these podcasts as examples for analysis of the issues listed above. In the cases of character voice, instructors can guide students to examine how the character's voice changed and settled to reflect a more natural speaking tone versus the highly-performed voice in earlier episodes to demonstrate the necessity for relaxed vocal folds. Mise-en-corps can be assessed when comparing the character's voice to the character and player. Lastly, the gendered voice can be analyzed both in terms of being burdened by stereotypes, such as the example of Taako in *TAZ,* and in terms of the necessity of pitch-to-gender expectations, such as the example of Ron Stampler in *Dungeons and Daddies.* Although the "best practices" laid out by many broadcasting textbooks are contradictory, exclusionary, and widely untenable, the *intent* of the books is to create effective communicators to distribute information on mass scales. Actual Play

podcasts—like many other subgenres of podcasts—are full of interstices that can be explored by creators, writers, and researchers to see what affordances each genre contains and how those affordances can be used to broaden the range of voices that are heard within the genre to also normalize those voices. Through audience-centered and context-sensitive approaches to vocal performance, instructors and creators can expand the number of voices that are used and heard behind the microphone to serve the public's interest, convenience, and necessity.

INTERLUDE III – Voice

Perhaps the assignment that hits the nail hardest on the head that encapsulates my research is the mini project I assign in tandem with my students' final project in their College Research and Writing course. Their final project is a community-centered research project where they compose their research in a genre appropriate to their audience. To prepare them for remediation and to prepare them to be mindful of how they represent others' lived experiences, I give my students the prompt that can be found in Appendix A. In this project, they are meant to remediate their voice in a way that shows someone who has never heard their voice before something about their voice. These projects could take any form the student choice, and some suggested genres were podcasts, poetry, videos, or creative nonfiction. The projects that my students made about their own voices were insightful to perceptions of themselves, vocal norms, and anxieties that exist because of those vocal norms. Since this project is intensely personal, I chose not to have them share and view others' projects about themselves, though I would advocate in the future to attempt a group discussion over each other's projects if the climate is right in the classroom.

Although students were encouraged to use any genre to compose their vocal remediation, most chose to do a short podcast and narrate their thoughts about their voice. In these responses, I noticed that students who deviated from the aural norm of white, middle-class, tenor-to-baritone-male-voiced English were more likely to include how aspects of their identity, such as race, disability, and age, affect their voice. Maria, who is diabetic, explained how she notices her pitch and tone change in relation to her blood sugar. Natalie, who is Black and bilingual, noted how she's often told she "doesn't sound Black" on the phone and how she

notices an accent when she speaks her second language. Mark, who identifies his voice as high-pitched for a male, expressed the anxieties he dealt with in relation to his voice, and how he was afraid of making a bad first impression when people hear him speak. However, these students also noted that they overall have a positive relationship with their voice and reminisced how their voice changed as they grew and as they applied it in different contexts.

One of these contexts was singing and other vocal performing arts, such as spoken poetry. Several of my students were performers and musicians of varying abilities. Some majored in vocal arts, others only performed through high school, and others were hobbyists. Lauren, a vocal performance major, wrote a poem that showed her vocal journey as she learned to polish her voice as she developed a sense of what she wanted her voice to be. An excerpt reads,

When I was eight,

I heard myself sing

A recording my mom took,

I didn't feel a thing.

When I was eleven,

And twelve, and thirteen,

I wished it was smooth. Laminated,

glossy sheen.

This excerpt shows Lauren's growing awareness of her developing voice and her recorded voice—when she was younger, the recording had little impact but then became a point of contention as it differed from the "smooth" voice she desired. Similarly, another student, Gabby, expressed her frustration with her recorded singing voice. She said, "I really like to sing, but I don't have the best voice for it .... which is funny because I really enjoy singing and sometimes, I feel like I can sing well, but when I listen to the recording.... yeah... changed my mind." Although she does not elaborate on what about her voice is less desirable in the recording versus when she hears herself, Maria, who sang in multiple choirs throughout middle and high school, identified herself as a Soprano I, which means she was in the group of singers with the highest vocal range of the choir. She explains her pride in being able to sing lower notes as she got older but has since lost the higher end of her vocal range. Even something as seemingly subtle as moving from Soprano I to Soprano II or even Alto can affect job prospects in musical professions or what roles are available to them in musical performance. Something as slight as a one-note shift in one's vocal range has a serious impact beyond whether they sound "good" or not because of vocal range expectations.

Many of my students showed some awareness of what is considered to be an "appropriate" voice without explicitly stating it, even students who fit the "norm." For example, Jackson wrote: "When I hear myself talking, I sound pretty normal. It's not too high, not too low, right in the middle... but if I listen to it on audio, it really sounds like my voice is a choked squirrel and I hate it." He later elaborated to say that his voice sounds higher when he listens back to recorded audio, but he became used to it as he listened to the audio repeatedly while editing it into different podcasts. What this reveals is an internalized anxiety that higher-pitched

male voices are "wrong," which mirrors Mark's anxiety about having trouble with first impressions because of his higher-pitched voice. However, another student named Caden, who has a significantly deeper voice, explains how his "deep and raspy" voice may come off as "rude and not nice." These three students' projects in conjunction now demonstrate that there is a collective assumption that voices that are too deep or too high are less desirable than ones that are "right in the middle." These students did not talk about how they concluded what makes a voice desirable, but their response is enough justification that work *can* be done in the classroom to challenge these biases, even about themselves, and consider ways their voice and others' voices can be remediated to allow a larger scope of what is acceptable, appealing, friendly, and less like a "choked squirrel."

However, despite the short nature of the project and the wide range of choices to remediate their voice, some of my students reminisced on the meaning of one's voice. For example, Caden expresses the complex nature of the voice by saying,

> To be asked about my voice is a very complex topic, one of my most impactful and used systems of my body yet I initially couldn't come up with a single way to talk about it. I really wanted to focus on the fact that my voice is just a part of me and can make a huge impact on any instance that occurs in my life when I speak.

Although Caden expresses how he could not come up with a "single way" to talk about his voice, I consider this an affordance instead of a constraint. Like media, the voice is a surplus. The voice is involved with so many aspects of one's physical and social body. From the firing of neurons in the brain to form thoughts to words, to the pushing of air from the lungs to help the

vocal folds vibrate, to the faces one makes and hand gestures one uses while we are speaking, to how one's intended audience can understand the speaker, the voice is interwoven with *so much* of one's being and so much of how others perceive a person. If one speaks too loudly or too softly, people may lose interest in what that person has to say, even if what is said is of value to them. They may wonder what "went wrong" in their upbringing that makes them use such a loud voice indoors or may attribute their natural speaking volume to other aspects of their character. Because this project made their voices an active part of the conversation, my students were more aware of their voice, its impact on them, and how they have monitored their voice over their lifetime.

The awareness my students demonstrated about their voices is similar to a lesson taught in David Foster Wallace's speech, "This Is Water", which opens with the following story:

> There are these two young fish swimming along, and they happen to meet an older fish swimming the other way, who nods at them and says, "Morning, boys, how's the water?" And the two young fish swim on for a bit, and then eventually one of them looks over at the other and goes, "What the hell is water?"

Just as the fish are surrounded by water, my students use their voices *constantly* and are surrounded by others' voices as well. Because drawing conclusions about voices based on repeated, insidious messages of what's right and wrong ways of speaking is so normalized, it is easy to be unaware of the biases created by these conclusions. While I do not think that this project solves that issue, it *does* provide a starting point to discuss how they came to their conclusions and, subsequently, what they can do to mitigate their and others' biases. As I have

argued before, media creation is one way of mitigation. In their final projects, especially if their research is for a community that they are not a part of, I stress that students should not use language that others their community and to compose their project speaking about their community with the empathy and justice they would hope to receive if they were in that community. This project provides a focal point for the argument that so many assumptions are made about a person by the way they speak, and that is only one facet of their being—imagine how many other assumptions one could make about someone about any one of their other idiosyncrasies and why it is important for researchers not to let those assumptions drive their research and composition. Then, I encourage students to consider the medium and genre they are using to compose their research and think of how they can manipulate the elements of that genre to normalize their community.

Another important observation that several of my students made was about their perceptions of their voice in relation to how often they must listen to it in recordings and in relation to outside factors such as the content of what they are talking about, as well as emotional well-being while speaking. James explains,

> Usually when I hear myself talk, I hate how it sounds.... I really just can't stand how I sound. But when I did the podcast, I found myself not minding it ... I feel like if I'm talking about something intellectual, I feel a little bit better for myself because I'm saying something smart.

There are two points he implies that I noticed in other students' work as well: it is easier to listen to oneself if they are confident and authoritative ("saying something smart"), and that

repeated exposure to their recorded voice through editing made their voice more palatable to themselves. Another student, Gabby, says that when she is nervous, she does not speak because she notices that her voice shakes and does not want others to hear that. However, if she feels comfortable and confident that her voice will not shake, she does not have a problem with speaking. Gabby also notes that when she is recording her voice, she tries to talk in a deeper tone—echoing how James and Mark expect that their voices need to be deep to be appealing—but when in casual settings, she speaks with a softer and higher-pitched voice. Lee and another student, Ben, also admitted in their projects that by editing their recorded voice, they did not mind listening to it as much, even though it was unappealing and frustrating at first. Although there is a normal disconnect between what one hears when hearing themselves speak live versus listening back to an electronic recording that can be jarring for some, I also argue that their initial distaste goes beyond hearing their voice through a different medium because they point out *imperfections.* They claim that their voices are too high, too shaky, not the right tone... not one of them settled with simply saying it sounds different. They all had something to criticize about it, which implies that they have formed a canon of what makes a voice acceptable in a recording, and their voice did not fit that. However, as they were exposed to their voice through the editing process and, during that time, listened to themselves more than others, their voice joined the canon of acceptable recorded voices—even just for a moment of time—because they were creating a project that was meant to stand on its own. Their voices were invited to create a new canon, and although I did not ask them how they felt about their voices after completing the project, I would hope they would learn to be kinder to themselves because of it.

Finale – Interstitial Space Oddity

The focus of this research has been on the use of existing technologies to seek out interstices in media to compose in ways that include a wider and more diverse range of people. The examples I used in this dissertation to demonstrate this idea by showing how specific comics, video games, and podcasts exposed these interstices through voice reproduction and by adjusting formal elements of these genres to achieve presenting the voice in a way that is aligned with—yet slightly different—from other works within that genre. Although focusing on human voice reproduction in media is not the only way to expose these interstices, it is *one* way to accomplish teaching more nuanced concepts of media literacy. Because my intended audience and purpose is to provide ways of teaching media literacy and composition to fellow FYC and media instructors, I will summarize the central ways that the examples from each chapter exposed these interstices in hopes that those reading it could apply these examples in ways that work for their own classrooms to encourage students to create media that is more inclusive and accessible. My theory of interstices exists both as a theory and a heuristic at once; the theory is simplistic in the sense that its core argument is that metaphorical and material spaces exist within media that can be manipulated by those trained enough to visualize it, but its application as a heuristic is where its complexity exponentially increases.

Interstices are sites of possibility, and one can apply Thing Theory to how these sites are observed, identified, and manipulated differently because things "appear in the name of relief from ideas" (Brown 5). Combined, interstices and Thing Theory reveal the infinite matrix of possibilities that composing in different media forms provides. Below, I will recapitulate how voice reproduction was used in each media genre discussed in my previous chapters, and then

list the interstices more broadly in Appendix B so that an instructor can use my theory of interstices with the examples from my chapter and connect the ideas to something more appropriate to their class instead of having to dedicate the lesson to voice remediation.

Concerning Comics

As stated in my comics chapter, sound studies scholar Jonathan Sterne writes that "[d]eafness was at the very beginning of sound reproduction" (41) because engineers studied deafness to understand how we can reproduce sound. This led to early sound reproduction being focused on replicating effects instead of their causes. Although comics primarily reproduce causes of sound instead of effects, it succeeds in both by using visual symbols. Although one does not listen to a comic in the same way they listen to a live conversation, and it may seem strange to suggest that encounters with comics involve any kind of listening—yet readers still can understand who is talking and what is being said so long as they are able to read the comic page. Formal elements of comics such as font type, speech bubble shape, and color signal to the reader what qualities the speaker's voice has and allow the reader to aural-visually distinguish idiosyncrasies in characters' voices. In *Hawkeye* #19, the authors employ these elements to remediate voices as the character listening would perceive them instead of how the words were spoken. This leads to ambiguity in what was said, potential frustration for the character/reader, and doubt and isolation by the character trying to communicate back with the speaker—in this case, Hawkeye/Clint Barton.

This chapter draws largely from Nick Sousanis's theoretical graphic novel, *Unflattening,* where he describes the novel as "insurrection against the fixed viewpoint," claiming that it

amalgamates the "diverse ways of seeing drawn from science, philosophy, art, literature, and mythology ... to show that perception is always an active process of incorporating and reevaluating different vantage points."[34] *Unflattening* provides a foundation for interstices in comics because pulling apart the different comic elements and metaphorically unflattening the page by picking the interstice from the rest and working with it to compose the comic as a whole. Like *Unflattening,* my theory of interstices calls for an intervention to the unthought and unseen that is at the same time right in front of us. The comic I analyzed in this chapter received many awards and much acclaim in the comics community and has many papers published about it in the academy. However, we now can expand its reception through analysis and use it as an example of how comics can be used to promote the experiences of people with disabilities in a way where the reader can experience the story through the perspective of a character with a disability. Other works, such as Cece Bell's *El Deafo* and Peter Dunlap-Shohl *My Degeneration,* similarly use comics for this purpose, and an instructor can use these texts together for students to analyze the interstices in comics that make them appropriate to tell stories about disability.

Vetting Video Games

In this chapter, I covered how video games use procedure and feedback loops to make the player associate with the character because the actions on-screen are a result of their input into the game controller. In the games I discussed, the creators remediated the characters'

[34] Sousanis, Nick. "Unflattening - Nick Sousanis." *Nick Sousanis | Harvard University Press*, 20 Apr. 2015, https://www.hup.harvard.edu/catalog.php?isbn=9780674744431.

voices through text and sound effects/soundmarks instead of using recorded lines from a voice actor. These examples focused on the effect that the dialogue has on the character instead of the aural accuracy of making recorded voice lines that sound exactly like human speech. While *Missing Memories* remediated the voice with different text animations to demonstrate positive and negative reactions to what was said to the character, *Binary Distortion* used soundmarks to differentiate between the self and the other when there was dialogue between the character and other people in their past. Additionally, *Binary Distortion* used eerie ambient music to continuously put the player in an uneasy state, which would subsequently color any dialogue or narration they read in the game. Games do not have to rely on making a "realistic" remediation of the voice for its effect to be realistic because they can hypomediate the "really real". Although neither game in this chapter had voiceover dialogue, the affect of how the transgender characters responded to the dialogue is realistic to the experiences that transgender people live. We can then draw a line to Thing Theory, where Thomas and Thomas state that "If [people] define situations as real, they are real in their consequence" (572). Because video games must establish rules and meaning to otherwise arbitrary elements,[35] they provide many interstices where creators can simulate the consequences that cause the situations to be real for as long as the person is playing that game.

At the time of this dissertation, right-wing nationalists are waging a culture war against transgender people that is built on misinformation and disinformation. As I stated in my chapter, which I wrote in July of 2022, the first half of 2022 saw just over 100 anti-trans laws

[35] Such as a "brrng!" sound when Mario jumps, or the dissonant chord in Missing Memories soundmarking dysphoria

proposed in the United States. As I write this paragraph on January 14th, 2023, the United States has proposed over 100 anti-LGBTQ laws in the first *two weeks* of the new year.[36] [37] Exposing interstices in video games that allow the player to step into the shoes of a transgender character or studying how trans voices are remediated in games will not be enough to counter such a culture war or teach about the systemic erasure of queer folk, but it still acts as a site of intervention. Instead of making media that *could have* been transphobic or that *could have* ignored their experiences entirely, someone chose to use the affordances available through video games to tell a story through the lens of a character from an oppressed minority group. Only 1.4% of the US population identifies as trans, meaning much of the population does not know what it is like to be transgender. By interacting with this game, the player is allowed to step momentarily into the remediated shoes of a trans person. Similarly, teachers can encourage their students as they analyze the interstices of the media and question whose stories are not heard that must be heard, and how the interstice can amplify these stories.

Practicing Podcasts

In this chapter, I focused more on the pedagogy practices with remediating the voice than in others because this genre relies the most on using a human voice. While video games and comics can have remediated voices in them without a human producing them, it is virtually unseen to have a Podcast without a person using their voice in it. Therefore, it is important to

[36] Yurcaba, Jo. "With over 100 Anti-LGBTQ Bills before State Legislatures in 2023 so Far, Activists Say They're 'Fired Up'Jo." *NBCNews.com*, NBCUniversal News Group, 14 Jan. 2023, https://www.nbcnews.com/nbc-out/out-politics-and-policy/100-anti-lgbtq-bills-state-legislatures-2023-far-activists-say-fired-rcna65349.

[37] As I edit this in March of 2023, there have been over 300 anti-LGBTQ bills proposed this year.

include how the voice is taught to compose within this genre because it is the metaphorical backbone of podcasting, whereas video games and comics can rely on other elements to convey information, such as visual and haptic modalities. Traditionally, the world of broadcasting was dominated by upper-to-middle-class white men, and vocal artists were encouraged to practice their voices to emulate a particular and narrow aesthetic. This practice excluded many demographics, such as women, people with disabilities, and people with marked accents that deviated from the standard Midwest accent. Although some textbooks provided alternatives that allowed space for nonwhite and nonmale people and although podcasts have a more diverse range of presenters, the editing and recording practices still adhere to a habitus of ableism. Some experts have presented the audience-centered model of teaching announcing, which results in more interstices that can be manipulated. Instead of creating a canon of what makes an "ideal" voice within a genre/subgenre that limits who can present and who audiences hear, producers must question what it is the audience wants and needs and then assign whoever can fill that niche—and that voice can come in any tone and accent so long as it fills that niche.

Actual Play podcasts are a distinctly different subgenre of podcast, but one that allows the queering of identity, limited audio editing, and the blurring of "backstage" versus "frontstage" behaviors. Not all of these aspects from Actual Play podcasts are appropriate in other subgenres, such as life news broadcasting, but students can still be encouraged to examine what guidelines are more malleable than others within these subgenres as analyze the traditional aspects of broadcasting that Actual Play does not adhere to so that they may make space for more people than were historically invited to participate in broadcasting.

Though these podcasts were made primarily for entertainment purposes, the interstices and possibility for these podcasts to be more than what was originally intended show its extended consequences. If there were none, then there would be little writing about it. However, both academic and non-academic writers have documented how Actual Play podcasts assisted a cultural shift in the TTRPG community and were used for purposes besides entertainment. This also shows that the same interstice can be manipulated in different ways by those that make the media and those that evaluate or consume it. For example, the most popular *D&D* podcasts all feature players who roleplay as characters who do not share a gender with the player, and while the player adjusts their voice to fit the character more, they are not stopped from playing that character because their voice isn't masculine or feminine enough to "realistically" play a man or woman. The same interstice and affordance in podcasts that they used to play a character whose identity is different than theirs is an interstice that people can utilize in the future to allow people whose voices may not align with the norms for their own identities. Men with feminine voices and women with masculine voices now have a point of reference to push back on pressures to change their voice based on dated and hegemonic sensibilities of what men and women "should sound like." Students can also interrogate how the curation of voices in podcasts affected their perceptions of their own or others' voices.

Final Thoughts

The overarching goal of this dissertation is to cultivate a more equitable world through media and teaching media literacy. The world will not become wholly equitable through these means alone, and I believe very little will change as a result of this. However, *some* change can be made through these methods, and the act of starting new conversations is enough of a catalyst

for the intervention I hope my research provides. The goals of this dissertation will be achieved so long as someone is teaching media in this manner because it opens the conversations beyond "who is at the table?" and shifts it to "how can I change what is in front of me to leave things better than when I got here?"

this space looks empty because your genre awareness tells you it is.


And that's kind of it... it's all about what you do with what you have
Genre
what you look for and how you teach it.
And hopefully something comes out that helps people
our
Community
And Beyond

References

Aarseth, Espen J. (1997). Cybertext—Perspectives on Ergodic Literature. Johns Hopkins University Press. pp. 1–2. ISBN 978-0801855795.

Altman, Rick. Sound Theory, Sound Practice / Edited by Rick Altman. Routledge, 1992.

Anderson, Virgil A. *Training the Speaking Voice*. 3rd ed., Oxford University Press, 1977.

Ahmed, Sara. The Cultural Politics of Emotion / Sara Ahmed. Second edition., Routledge, 2015.

"Audio and Podcasting Fact Sheet." *Pew Research Center's Journalism Project*, Pew Research Center, 12 Oct. 2022, https://www.pewresearch.org/journalism/fact-sheet/audio-and-podcasting/.

Aufderheide P (1993) *Media Literacy: A Report of the National Leadership Conference on Media Literacy*. Aspen, CO: Aspen Institute.

Austin, Ashley et al. "Suicidality Among Transgender Youth: Elucidating the Role of Interpersonal Risk Factors." *Journal of interpersonal violence* vol. 37,5-6 (2022): NP2696-NP2718. doi:10.1177/0886260520915554

Bai, He. "A Cross-Cultural Analysis of Advertisements from High-Context Cultures and Low-Context Cultures." *English Language Teaching*, vol. 9, no. 8, 2016, p. 21., https://doi.org/10.5539/elt.v9n8p21.

Bazerman, Charles. "Chapter 13. Genre as Social Action." *Routledge Handbook of Discourse Analysis*, Routledge, S.l., 2023.

Bernhardsson, E. (2017, Feb 1). *Language Pitch*. Erik Bernhardsson. Retrieved November 6, 2022, from https://erikbern.com/2017/02/01/language-pitch.html

Bijsterveld, Kristin. *Soundscapes of the Urban Past*. Transcript Verlag, 2013.

"Binary Distortion by Riotjayne" Itch.io, riotjayne.itch.io/binary-distortion.

Bishop, James. "A Brief History of Podcasting." *OneFinePlay*, 10 Mar. 2021, https://www.onefineplay.com/blog/a-brief-history-of-podcasting.

Bloom, Gina. Voice in Motion: Staging Gender, Shaping Sound in Early Modern England. University of Pennsylvania Press, 2007.

Bramlett, Frank, 'Why There Is No "Language of Comics"', in Frederick Luis Aldama (ed.), The Oxford Handbook of Comic Book Studies (2020; online edn, Oxford Academic, 14 Mar. 2019), https://doi.org/10.1093/oxfordhb/9780190917944.013.2, accessed 7 Aug. 2022.

Branston, Gill., and Janet Thumim. *Me Jane: Masculinity, Movies, and Women / Edited by Pat Kirkham and Janet Thumim.* First edition., St. Martin's Press, 1995.

Broadcast Education Association. "BEA Syllabus Project." 1 May 2001. http://www.beaweb.org/pubs1.html

Brown, Bill. "Thing Theory." Critical Inquiry, vol. 28, no. 1, University of Chicago Press, 2001, pp. 1–22, doi:10.1086/449030.

Brown, Jeffrey A. "Comic Book Fandom and Cultural Capital." Journal of Popular Culture, vol. 30, no. 4, 1997, pp. 13–31.

Burton, A. (2021). Identity Negotiation and Resistance in *Dungeons & Dragons* Liveshow *Critical Role*. *UC Irvine: Humanities Honors Program*. Retrieved from https://escholarship.org/uc/item/2gw1d97n

Buurma, Rachel S., and Matthew K. Gold. "Contemporary Proposals about Reading in the Digital Age." D. Richter, ed. A Companion to Literary Theory. Wiley Blackwell, 2018. 139-150. Print.

Carse, James P. Finite and Infinite Games / James P. Carse. First Ballantine Books edition., Ballantine Books, 1987.

Casey M. Ratto. "Not Superhero Accessible: The Temporal Stickiness of Disability in Superhero Comics." Disability Studies Quarterly 37.2 (2017): Disability Studies Quarterly, 01 June 2017, Vol.37(2). Web.

Ceraso, Steph. "Teaching Soundwalks." Sounding Out!, https://soundstudiesblog.com/tag/steph-ceraso/.

Ceraso, Steph. Sounding Composition: Multimodal Pedagogies for Embodied Listening, 2018.

Chion, Michel, and Steintrager, James A. Sound: An Acoulogical Treatise. Duke University Press, 2016.

Chion, Michel, and Claudia Gorbman. *The Voice in Cinema*. Columbia University Press, 2008.

Christenfeld, N. Does it hurt to say um?. *J Nonverbal Behav* **19**, 171–186 (1995). https://doi.org/10.1007/BF02175503

Chute, Hillary L. Graphic Women: Life Narrative and Contemporary Comics / Hillary L. Chute. Columbia University Press, 2010.

Chute, Hillary L., and Gary Panter. Why Comics?: from Underground to Everywhere / Hillary Chute. First edition., Harper, an imprint of HarperCollinsPublishers, 2017.

Cohn, Neil. The Visual Language of Comics: Introduction to the Structure and Cognition of Sequential Images / Neil Cohn. Bloomsbury Academic, An imprint of Bloomsbury Pub. Plc., 2013.

Collins, Karen. Game Sound - An Introduction to the History, Theory, and Practice of Video Game Music and Sound Design. The MIT Press, 2019.

Collins, Karen. Playing with Sound: a Theory of Interacting with Sound and Music in Video Games. The MIT Press, 2013.

Couldry, N. (2008). The place of media power: Pilgrims and witnesses of the media age. Routledge.

Cook, Monte, et al. Dungeons & Dragons Player's Handbook. Wizards of the Coast, 2014.

Dennis Waskul and Matt Lust, "Role-Playing and Playing Roles: The Person, Player, and Persona in Fantasy Role-Playing," Symbolic Interaction 27, no. 3 (2004): 335. https://doi.org/10.1525/si.2004.27.3.333

DeVille, Chris. "The Rise of D&D Liveplay Is Changing How Fans Approach Roleplaying." *The Verge*, The Verge, 16 Nov. 2017,

https://www.theverge.com/2017/11/16/16666344/dungeons-and-dragons-twitch-roleplay-rpgs-critical-role-streaming-gaming.

Dokumaci, Arseli. "Disability as Method: Interventions in the Habitus of Ableism through Media-Creation." Disability Studies Quarterly, vol. 38, no. 3, The Ohio State University Libraries, 2018, doi:10.18061/dsq.v38i3.6491.

Dolmage, Jay Timothy. *Disability Rhetoric.* Syracuse: Syracuse UP, 2013. Print.

Dolmage, Jay. Academic Ableism: Disability and Higher Education. University of Michigan Press, 2017.

Dragojevic, M., & Goatley-Soan, S. (2020). Americans' attitudes toward foreign accents: Evaluative hierarchies and underlying processes. *Journal of Multilingual and Multicultural Development*, *43*(2), 167–181. https://doi.org/10.1080/01434632.2020.1735402

Dunn, Leslie C., and Nancy A. Jones. *Embodied Voices: Representing Female Vocality in Western Culture / Edited by Leslie C. Dunn and Nancy A. Jones.* Cambridge University Press, 1994.

Eisner, W., & Eisner, W. (2008). Comics and sequential art: principles and practices from the legendary cartoonist / Will Eisner. New York: W.W. Norton.

Fraction, Matt. "Hawkeye #19." Hawkeye vol. 4, issue no. 19, Marvel, 2014

Fink, D. G., Fisher,. Marshall Jon, Noll,. A. Michael and Fisher,. David E. (2020, January 31). television. Encyclopedia Britannica. www.britannica.com/technology/television-technology

Fiocco, M. Oreste. "What Is a Thing?" Metaphilosophy, vol. 50, no. 5, Wiley Subscription Services, Inc, 2019, pp. 649–69, doi:10.1111/meta.12388.

Frazier, Ran A. "Bryan Fischer Calls 'Modern Family' 'Poison,' Ty Burrell Calls It 'Progress'." *The Advocate*, Advocate.com, 29 Mar. 2014, https://www.advocate.com/politics/media/2014/03/29/bryan-fischer-calls-modern-family-poison-ty-burrell-calls-it-progress.

Hagood, Mack. Hush: Media and Sonic Self-Control / Mack Hagood. Duke University Press, 2019

Galloway, Alexander. Gaming: Essays on Algorithmic Culture. Minneapolis: Minnesota UP, 2006.

Galloway, Alexander R., et al. Excommunication: Three Inquiries in Media and Mediation. The University of Chicago Press, 2014.

Galloway, Alexander R. *Protocol: How Control Exists after Decentralization / Alexander R. Galloway.* MIT Press, 2004.

Geertz, Clifford. *The Interpretation of Cultures: Selected Essays / by Clifford Geertz.* Basic Books, 1973.

Glass, I. (2021, November 8). *Special effects story*. This American Life. Retrieved August 19, 2022, from https://www.thisamericanlife.org/203/recordings-for-someone/act-two-12

Goffman, Erving. *The Presentation of Self in Everyday Life.* Overlook Press, 1973.

González, M. D. (2018, February 8). *Low and high: Context in communication*. IXMATI. Retrieved October 22, 2022, from https://ixmaticommunications.com/2016/06/28/low-and-high-context-in-communication/

Grabe, S., Ward, L. M., & Hyde, J. S. (2008). The role of the media in body image concerns among women: A meta-analysis of experimental and correlational studies. *Psychological Bulletin, 134*(3), 460–476. https://doi.org/10.1037/0033-2909.134.3.460

Green R, Delfabbro PH, King DL. Avatar identification and problematic gaming: The role of self-concept clarity. Addict Behav. 2021 Feb; 113:106694. doi: 1016/j.addbeh.2020.106694. Epub 2020 Oct 7. PMID: 33099249; PMCID: MC7539898.

Hammersley, Benjamin. "Why Online Radio Is Booming." *The Guardian*, Guardian News and Media, 12 Feb. 2004, https://www.theguardian.com/media/2004/feb/12/broadcasting.digitalmedia.

Hayles, N. Katherine. How We Became Posthuman Virtual Bodies in Cybernetics, Literature, and Informatics / N. Katherine Hayles. University of Chicago Press, 1999.

Heidegger, Martin, et al. What Is a Thing? / Translated by W.B. Barton, Jr., and Vera Deutsch, with an Analysis by Eugene T. Gendlin. H. Regnery Co., 1968.

Heidegger, Martin, and William Lovitt. The Question Concerning Technology, and Other Essays / Martin Heidegger; Translated and with an Introduction by William Lovitt. HarperCollins Publishers, 2013.

Henneke, Ben Graf, and Edward S. Dumit. *The Announcer's Handbook / Ben Graf Henneke [and] Edward S. Dumit.* Holt, Rinehart and Winston, 1959.

House, Ryan. "Couch Surfing | A Way-out Part 1." YouTube, YouTube, 3 Sept. 2019, https://www.youtube.com/watch?v=bqUWZZ2rcsw&t=587s.

"How Are You Doing?" Rosequartzklein. Itch.io, https://transrightsrose.itch.io/how-are-you-doing.

Human Rights Campaign. https://hrc-prod-requests.s3-us-west-2.amazonaws.com/Blueprint-2020.pdf?mtime=20201110185320&focal=none.

"The Infinite Dial 2021." *Edison Research*, Edison Research Http://Www.edisonresearch.com/Wp-Content/Uploads/2014/06/Edison-Logo-300x137.Jpg, 15 Mar. 2021, https://www.edisonresearch.com/the-infinite-dial-2021-2/.

Jacobs, Dale and Jay Dolmage. "Accessible Articulations: Comics and Disability Rhetorics in Hawkeye #19." Inks: The Journal of the Comics Studies Society, vol. 2 no. 3, 2018, p. 353-368. Project MUSE, doi:10.1353/ink.2018.0024.

Jakobson, R. (1972). "Verbal Communication". *Scientific American* 227: 72–80

"Journalism & Media Glossary." *The News Manual - Glossary*, http://www.thenewsmanual.net/Resources/glossary.html.

Keith, Michael C. *Broadcast Voice Performance*. Focal Press, 2022.

Kenny, Carolyn. *Listening, Playing, Creating: Essays on the Power of Sound / Edited by Carolyn Bereznak Kenny.* State University of New York Press, 1995.

Knabb, Ken. "Situationist International Texts." Situationist International Online, https://www.cddc.vt.edu/sionline/si/theory.html.

Köksal, & Yürük, N. (2020). The Role of Translator in Intercultural Communication. International Journal of Curriculum and Instruction, *12*(1), 327–.

Kurinec CA, Weaver CA 3rd. "Sounding Black": Speech Stereotypicality Activates Racial Stereotypes and Expectations About Appearance. Front Psychol. 2021 Dec 24; 12:785283. doi: 10.3389/fpsyg.2021.785283. PMID: 35002876; PMCID: PMC8740186.

Later, Naja. "7. The deaf Issue Hawkeye #19 and Deaf Accessibility in the Comics Medium". Uncanny Bodies: Superhero Comics and Disability, edited by Scott T. Smith and José Alaniz, University Park, USA: Penn State University Press, 2021, pp. 141-156. https://doi.org/10.1515/9780271086323-009

"Legislative Tracker: Anti-Transgender Legislation Filed for the 2022 Legislative Session." *Freedom for All Americans*, https://freedomforallamericans.org/legislative-tracker/anti-transgender-legislation/.

Levine, M. P., & Chapman, K. (2011). Media influences body image. In T. F. Cash & L. Smolak (Eds.), *Body image: A handbook of science, practice, and prevention* (pp. 101–109). The Guilford Press.

Lewis, David. "Seeing Sounds / Hearing Pictures – a Round Table on Sound & Comics (Part One)." The Middle Spaces, 27 Dec. 2019.

Liu, Jun. "Effects of Comic Strips on L2 Learners' Reading Comprehension." TESOL Quarterly, vol. 38, no. 2, [Wiley, Teachers of English to Speakers of Other Languages, Inc. ((TESOL)], 2004, pp. 225–43, https://doi.org/10.2307/3588379.

Malaby, Thomas M. "Beyond Play: A New Approach to Games." Games and Culture, vol. 2, no. 2, 2007, pp. 95–113.

Malaby, Thomas M. "The Digitally Natural: Hypomediacy and the "Really Real" in Game Design." The Routledge Companion to Media Anthropology. Routledge, 2022, pp. 105-117

McCloud, Scott. Understanding Comics: the Invisible Art / Scott McCloud. HarperPerennial, 1994.

McCloud, Scott. Reinventing Comics: [the Evolution of an Art Form] / Scott McCloud. First Perennial edition., Perennial, 2000.

McLuhan, M., & Fiore, Q. (1967). *The medium is the massage / Marshall McLuhan [and] Quentin Fiore. Co-ordinated by Jerome Agel.* Bantam Books.

Mildorf, Jarmila, and Till Kinzel. Audionarratology : Interfaces of Sound and Narrative / Edited by Jarmila Mildorf and Till Kinzel. Edited by Jarmila Mildorf and Till Kinzel, De Gruyter, 2016, doi:10.1515/9783110472752.

McWhorter, John. "Thick of Tongue." *Guernica*, 23 Oct. 2016, https://www.guernicamag.com/thick-of-tongue/.

Miremadi, S.A. (2004). *Theories of Translation and Interpretation*. Tehran: SAMT.

"Missing Memories" Rosequartzklein. Itch.io, rosequartzklein.itch.io/missing-memories.

Nell Haynes, et al. *The Routledge Companion to Media Anthropology*. No Funder Information Available, 2022, https://doi.org/10.4324/9781003175605.

Nip, I. S. B., & Garellek, M. (2021, August 9). *Voice quality of children with cerebral palsy*. Journal of speech, language, and hearing research: JSLHR. Retrieved November 12, 2022, from https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8740668/

Nordberg, A., Miniscalco, C., & Lohmander, A. (2014). Consonant production and overall speech characteristics in school-aged children with cerebral palsy and speech impairment. *International Journal of Speech-Language Pathology*, 16(4), 386–395.

Quentin Fiore. Co-Ordinated by Jerome Agel. Bantam Books, 1967.

O'Neil, Dennis, and Gary Groth. 1979. "Samuel R. Delany Interview." Comics Journal 48:37–43, 70–71.

O'Rawe, Catherine, et al. "Voice, Body, Accent." *Locating the Voice in Film: Critical Approaches and Global Practices*, Oxford University Press, 2017, pp. 157–172.

Owuamalam, Chuma Kevin, and Andrea Soledad Matos. "Heterosexual Men in Trump's America Downplay Compassion More for Masculine (than for Feminine) Gay Victims of Hate Crime: Why?" *European Journal of Social Psychology*, vol. 52, no. 2, 2022, pp. 280–304., https://doi.org/10.1002/ejsp.2787.

Perrin, Andrew. "Slightly Fewer Americans Are Reading Print Books, New Survey Finds." *Pew Research Center*, Pew Research Center, 30 May 2020, https://www.pewresearch.org/fact-tank/2015/10/19/slightly-fewer-americans-are-reading-print-books-new-survey-finds/.

Preston D. (2016) Cripping the Bat: Troubling Images of Batman. In: Foss C., Gray J.W., Whalen Z. (eds) Disability in Comic Books and Graphic Narratives. Literary Disability Studies. Palgrave Macmillan, London

R/letsplay - how to stop my mic picking up my mouse. Reddit. (2015, August 14). Retrieved August 16, 2022, from https://www.reddit.com/r/letsplay/comments/2a5kl8/how_to_stop_my_mic_picking_up_my_mouse/

Rosa, Joanne. "Eric Stonestreet Believes 'Modern Family' Helped Make America Less Homophobic." *ABC News*, ABC News Network, 22 May 2019, https://abcnews.go.com/Entertainment/eric-stonestreet-believes-modern-family-helped-make-america/story?id=63199858.

Rosenberg, Alyssa. "'Modern Family' and Gay Marriage: It's Complicated." *The Atlantic*, Atlantic Media Company, 13 Oct. 2010, https://www.theatlantic.com/entertainment/archive/2010/10/modern-family-and-gay-marriage-its-complicated/64397/.

Rudine Sims Bishop, The Ohio State University. "Mirrors, Windows, and Sliding Glass Doors". Perspectives and Using Books for the Classroom. Vo. 6, no. 3. Summer 1990

Satrapi, Marjane. Persepolis / Marjane Satrapi. First American edition., Pantheon Books, 2003.

Schofield, Ian. "As Podcasts Democratize Communication, Brands Must Be Receivers as Well as Transmitters." *The Drum*, The Drum, 17 Aug. 2022, https://www.thedrum.com/opinion/2022/08/17/podcasts-democratize-communication-brands-must-be-receivers-well-transmitters.

Scott, Suzanne. "Fangirls in Refrigerators: The Politics of (in)Visibility in Comic Book Culture."

Seelow, David. Lessons Drawn: Essays on the Pedagogy of Comics and Graphic Novels / Edited by David D. Seelow; Foreword by James Sturm. Edited by David Seelow, McFarland & Company, Inc., Publishers, 2019.

Smith, Scott T., and José Alaniz. Uncanny Bodies: Superhero Comics and Disability. Penn State University Press, 2019.

Smith, Talia. "Modern Family Made Our Parents Homophobic." *Your Mag*, Your Mag, 24 Oct. 2021, https://ymemerson.com/new-blog-3/2021/10/24/modern-family-made-our-parents-homophobic.

Sousanis, Nick. Unflattening / Nick Sousanis. Harvard University Press, 2015.

Spiegelman, Art. Maus: a Survivor's Tale / Art Spiegelman. 25th anniversary edition., Pantheon Books, 2011.

Stanton, Ryan. "The Audiences of The Adventure Zone: Analysing Actual Play as Inclusive Gaming Media." *DiGRAA Conference*, 2021.

Stein, Leo. The A-B-C of Aesthetics / by Leo Stein. Boni & Liveright, 1927.

Steintrager, James A., Rangan, Pooja and Chow, Rey. *Sound Objects*. Duke University Press, 2019.

Sterne, Jonathan. The Audible past: Cultural Origins of Sound Reproduction. Durham: Duke UP, 2003. Print.

Summers, Tim. Understanding Video Game Music / Tim Summers; Foreword by James Hannigan. Cambridge University Press, 2016.

The child in America: Behavior problems and programs. W.I. Thomas and D.S. Thomas. New York: Knopf, 1928: 571–572

"The The Adventure Zone Zone: Balance Finale Edition." *Maximum Fun*, 9 June 2020, https://maximumfun.org/episodes/adventure-zone/adventure-zone-zone-balance-finale-edition/.

Titchener, E.B. (1910). *Textbook of psychology*. New York: Macmillan.

Triandis, H. C. (1989). Self and social behavior in differing cultural contexts. *Psychological Review, 96*(3), 506–520

University of Oregon Center on Teaching and Learning. "Vocabulary: Concepts and Research." Uoregon.edu, 2019, reading.uoregon.edu/big_ideas/voc/voc_what.php.

UWM libraries research and course guides: Visiting students research guide: Media literacy in the K-12 classroom. Media Literacy in the K-12 Classroom - Visiting Students Research Guide - UWM Libraries Research and Course Guides at University of Wisconsin-

Milwaukee. (n.d.). Retrieved January 12, 2023, from https://guides.library.uwm.edu/visiting/media

Vieira, Kate. American by Paper: How Documents Matter in Immigrant Literacy / Kate Vieira. University of Minnesota Press, 2016.

Wassel, Damian A., et al. The Gifted. Creative Mind Energy, 2014.

White, William J. "Actual Play and the Laws of Media." In Aaron Trammell, Evan Torner, Shelly Jones, & Emma Leigh Waldron (Eds.). Role Playing Game Summit. (December 2019). http://analoggamestudies.org/2019/12/actual-play-and-the-laws-ofmedia

Whitten, Sarah. "How Critical Role Helped Spark a Dungeons & Dragons Renaissance." *CNBC*, CNBC, 14 Mar. 2020, https://www.cnbc.com/2020/03/14/critical-role-helped-spark-a-dungeons-dragons-renaissance.html.

Winter, C. (2003). Learning to Do What Comes Naturally: Delivery Instruction in Broadcast News Textbooks. *Journalism & Mass Communication Educator*, *58*(2), 131–146. https://doi.org/10.1177/107769580305800203

Wong, Freddie. "Dungeons and Daddies Episode 4." *Dungeons and Daddies*, Dungeons and Daddies, 27 Feb. 2021, https://www.dungeonsanddaddies.com/episodes/ep4.

Wong, Freddie. "Dungeons and Daddies Episode 3." *Dungeons and Daddies*, Dungeons and Daddies, 27 Feb. 2021, https://www.dungeonsanddaddies.com/episodes/ep3.

Yeates, Robert. "Serial Fiction Podcasting and Participatory Culture: Fan Influence and Representation in The Adventure Zone." European Journal of Cultural Studies 23, no. 2 (April 2020): 223–43. https://doi.org/10.1177/1367549418786420

Wysocki, Anne Frances. Writing New Media: Theory and Applications for Expanding the Teaching of Composition. Utah State University Press, 2004.

Yahr, Emily. "'Modern Family' Finale: After Much Anticipation, Mitch and Cam Get Married." *The Washington Post*, WP Company, 3 Dec. 2021, https://www.washingtonpost.com/news/arts-and-entertainment/wp/2014/05/22/modern-family-finale-after-much-anticipation-mitch-and-cam-get-married/.

Yu, Qiufen. "A Pragmatic Approach to Communication Styles in Radio Advice Talk Programmes in China and Britain." (2013).

Zajonc, R. B. (1980). Feeling and thinking: Preferences need no inferences. *The American Psychologist*, *35*(2), 151–175. https://doi.org/10.1037/0003-066X.35.2.151

Appendix A

Segment Three Mini Project

Due August 20th, 2022

In segment three, you are going to be creating a useable, public-facing product for your intended stakeholder in the Milwaukee community. As researchers, it is important for us to be mindful of how we talk about others - especially those affected by our research - and to understand how personal this information can be, even if it may not seem like it at first. Additionally, we will be practicing **remediation** in segment three, which is the process of "translating" information from one medium to another.

To prepare for our final project, we will practice remediating our voices. The goal is to reflect on the personal nature of our own voices as well as learning rhetorical dexterity and creativity to materialize something that is typically only heard. Just like you will be creating a project that remediates somebody's lived reality in Milwaukee for those who may not have experienced the same, you will remediate your voice so others can understand it when they may not have ever heard you speak before or do not understand what your voice means to you.

THIS PROJECT HAS TWO PARTS: The first part is the remediation, and the second part is a 75 to 100-word curation describing your thought process and the choices you made in your remediation so someone not in this class would be able to.

THIS PROJECT CAN TAKE ANY FORMAT THAT YOU WOULD LIKE, but it should be appropriate for how you want your voice to be represented.

Some example genres are:

- A podcast (1 minute long)

- A video (1 minute long)
- A brochure (1 page with some design elements and pictures)
- A drawing/picture/art piece
- Poetry (roughly 75 words. can be a single poem or a series)
- Creative nonfiction (roughly 150 words)
- A verse and chorus of an original song (or parody of an extant song)

You can suggest other genres if you would like. I would like you to avoid writing a paper about it. This project will count towards your participation grade and will be graded as either complete/incomplete. **You must complete both parts of the project or else it will be counted as incomplete.** This is an opportunity for you to take risks. I'm not expecting perfection.

Some questions for inspiration: What is your relationship with your voice? How do you feel hearing yourself speak versus hearing a recording of yourself speak? How do people treat you before and after hearing your voice? How do you think others' perception of you is affected by your voice? What is your favorite thing about your voice? What is your voice used for? What is your voice like in different contexts/settings/languages? How has your voice changed over time?

Appendix B

Below, I list the interstices of the example texts from all of my chapters with three of the four steps required for working with interstices. This is included for sake of ease should anyone want to teach this in their classrooms and need inspiration on where to start.

Comic Interstice/Issue/Intervention Examples in Hawkeye #19:

- Comic Speech Bubbles
    - Deaf and Hard of Hearing people experience communication differently than Hearing people.
        - The authors do not include text inside bubbles so the reader is deafened with the character. Authors indicate tone and volume by the shape of the speech bubble.

- The ability to the story from different perspectives (deaf vs hearing characters, character vs reader)
    - Not all Deaf and Hard of Hearing people can lip read fluently
        - The authors do not accurately write what a character says when speaking when Hawkeye is lip reading, and instead write what Hawkeye perceives as he attempts to lip read.

- Panels used to loosely measure the passage of time

- Sometimes Deaf and Hard of Hearing people can confidently interpret what is being said whereas other times they rely on context clues
    - The authors make the panel borders defined during clear moments of ASL/lip reading communication, but use open panels to simulate an uncertain passage of time to mimic Hawkeye's uncertainty as he struggles to lip read.

- Currently in the U.S. it is generally accessible for citizens to use the internet
    - Deaf and Hard of Hearing people's needs are often ignored and they must do additional research/work to have spaces made for or inclusive to them
        - The authors do not provide translations for Hearing people for the ASL used in the comic so that Hearing people experience briefly a space that is not made for their needs.

Video Game Interstices Examples in *Missing Memories* and *Binary Distortion*

- Text dialogue box
    - Transgender people experience dysphoria even with innocuous statements that cisgender people may not understand is jarring.
        - The author makes text that induces dysphoria shaken and unpleasant and makes the text that affirm their gender colorful and smooth.
    - Transgender people

        - The author includes their mother saying the character's deadname in the game but censors the name so the player does not know what it is.

- Nondiegetic sound effects
    - Transgender people experience dysphoria even with innocuous statements that cisgender people may not understand is jarring.
        - The author of *Missing Memories* uses soundmarks to startle the player when the character experiences dysphoria
        - The author of *Binary Distortion* uses dissonant ambient music to create a sense of unease and danger for the player

- Video games make the controller/character an extension of the player
    - It is difficult to articulate the experiences of being transgender to someone who is cisgender.
        - The author makes a game where the player must play as a transgender character and navigate the space through the character's perspective in conjunction with the player's own frames of reference.

Podcast Interstice Examples

- Actual Play podcasts do not require as much "clean up" editing as fully produced dramas.
    - TTRPG fans listen to Actual Play podcasts in part to listen to a remediated experience of playing "at the table"

        - Presenters do still edit their audio, but leave in some incidental noises and off-topic chatter that would typically be removed in other podcasts

- Episodes can be scripted, improv, and a combination of both
    - TTRPG fans want to make and consume TTRPG content beyond their own gameplay.
        - Presenters use scripted plot points with improv roleplay to create content for TTRPG fans

- Presenters are not required to share the identity of the personality they portray
    - Some TTRPG players argue that it "breaks immersion" for a man to play a female character and vice versa
        - Presenters take on various character roles, including ones that have wildly different body types and genders than the presenter's identity.

- Lower barriers of entry in comparison to other broadcast media
    - Most of the extant TTRPG content is made for straight, white men aged 25-34
        - Presenters produce podcasts with more diverse casts with characters and stories that are more queer, PoC, and women friendly.