Slide One: Hello, and thank you all for joining me today. My name is Kelly Brajevich and I will be presenting Transending Sound, a paper I wrote regarding sound studies, game studies, and how we can create a more equitable environment through ludosonic representations of embodied experiences. I do want to note that this presentation is about half of the written paper, so if it jumps around and feels disjointed, it's because it's half because I had to cull down a lot, and half because I am, in general, a doofus.

Slide Two: Equitable and diverse representation in video games is an issue with roots further back than Gamergate and yet in the near-decade that has passed since the cultural controversy, game culture is woefully vacant of a wide range of represented voices. Step-by-step, and with some tumbles backward, progress has undoubtedly been made, but not to the extent where scholars, players, and people in the industry feel that there is a just environment in games culture. While there are many lines of inquiry scholars and game creators can pursue to further more equitable representation in games, what this paper focuses on is how games can represent different lived experiences so people whose identities do not align with the narrators are able to understand others' experiences with more clarity.

My goal here is to not 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 encourage empathy and demonstrate the necessity of diversity in games. To do this, I will examine how sound is used as a means of representing embodied experiences. This will come through a discussion regarding rhetorical listening, game theory, and sound theory.

Slide Three: 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). Because of this, we are not only going to consider the player of the game, but the characters in the game as well as the games' creators. Games are an ecosystem contingent on the sociocultural milieus in which they reside and it would be a mistake to not consider the lived experiences of the games' creators and how it affects their choice in which games they make and what each game entails. By investigating how these contingent, moving parts work together, we can have a stronger understanding of how we can discuss games in ways that focus on its sociocultural implications more than its ludic or narrative qualities.

Slide Four: The games that I chose to exemplify in this paper are *Missing Memories* by Rose Quartz Klein and *Binary Distortion* by Riotjayne. Both games are created by one-teamed creators who are transgender and used their experiences to represent gender-related dysphoria, depression, and anxiety. It is easier to discuss how creators' experiences affect gameplay when we are discussing single-person teams as opposed to multiple creators collaborating with one another to create the game artifact. Additionally, both games explicitly use sound in order to achieve their goals of representing dysphoria and other gender-related anxieties, while other games made my trans creators do not utilize sound as strongly for their particular representations of their experiences. It is also important to note that, while I am exploring trans games that use sound to represent dysphoria, 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 are a breadth of indie games across many genres that allow different trans narratives to be heard.

Slide Five: So why use video games? In addition to the reasoning that it's my paper and I do what I want, there's also scholars in the field who note games' ability to create embodied experiences that have tangible, real-life implications as well. Games and sound scholar, Karen Collins, writes that video games are highly participatory, and its sound and visual cues are tied into actions based on player input. 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). She also 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. Through this mapping, players form connections between action, sound, and image to their new meanings and these new, sticky meanings can carry over outside of the game.

Slide Six: Thomas Malaby in his article, *Beyond Play,* defines 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 to promote social change and empathy.

Slide Seven: Games also complicate concepts of realism. Our understanding of realism in games draws from film theorists such as Jean-Luc Comoli and Sergei Eisenstein, but the ergodic nature of games calls for an additional consideration: action. Alexander Galloway in *Gaming: Essays on Algorithmic Culture* says that,

> Video games reside in a third moment of realism. The first two are realism in narrative (literature) and realism in images (painting, photography, film). For video games, it is realism in action... Any game that depicts the real world must grapple with this question of action. In this way, realism in gaming is fundamentally a process of revisiting the material substrate of the medium and establishing correspondences with specific activities existent in the social reality of the gamer (84).

Slide Eight: Through action, the player navigates the game space and is continuously asked to call upon previous in-game experiences while relating to past ludic experiences and their lived experiences in the material world. The trifecta of these realities inform player decisions and their response to the content in the game world. Games, unlike film, require nontrivial effort to continue the progress of the narrative and it is that relationship to the effort that provides an extra dimension of realism. Therefore, the player is able to interact with the game space in ways that the creators may not have anticipated, which deepen our understanding games and realities.

Slide Nine: *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 full of 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 in order 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 seeming to have little effect on the character beyond bringing up a fond memory for either the character or the mother.

The chaotic landscape of the game seen above is like a minefield. Not every item yields danger, but there is the potential of 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 is able to complete the game is to pick up *all* of 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 of 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 confronted that all of 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 interesting 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 seven-chord to aurally announce the dysphoric event. The seven 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 seven chord, by association, becomes parasitical because it

attempts to overshadow the easygoing music and siphons away the player's attention. The seven chord asserts itself as a soundmark. Michel Chion identifies soundmarks 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).

Although Chion gives the examples of soundmarks identifying 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. Seven chords exist out of *Missing Memories* – if a player hears a seven chord, it is possible they can later associate the sound to dysphoria. Although I don't believe that *Missing Memories* uses the seven chord in a way that it would make such a lasting 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.

Slide Ten: *Binary Distortion* is another game of the visual novel genre, although its game creator describes it as a 'kinetic novel'. The game creator, RiotJayne, is a trans creator who 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 with a soundtrack, and *Tranxiety*, a roleplay game. Unlike *Missing Memories,* the sound in *Binary Distortion* doesn't 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.

Slide Eleven: 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.

The game also incorporates glitchy visuals during the chapters, which also adds to an unnerving and 'off' experience, but the bedroom is visually tame in comparison. The visual and auditory nature of the game allows the player to experience the sonic event as an amalgamation of the two rather than as separate cause-and-effect relationships because game rarely uses sound effects that appear to be a cause of what is on the screen. Instead, it couples unnerving music to glitchy visuals in order 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 five, pitchless beats that accompany the bursts of text come in two speeds: slow and fast. The slower pace accompanies text that demonstrate 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 what separates the choice of slow versus quick beats, 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 choice 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.

Slide Twelve: Both of the 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. In order to do this, our focus of critical inquiry of sound must shift focus from how do we reproduce sounds to how can we 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 as representation, this particular line of inquiry does not necessarily tell us much about the ideas, things, and people that these sounds are meant to represent. 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 a gunfire to affectively impact a player if an alternative soundmark is established in the game to represent what gunfire is and 'sounds like'.

Now, we are opening up 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 into 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 paper's focus rests upon sound in games, I would advocate for any sensory or affective impression that impresses empathy on 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.

Slide Thirteen: And that's all I've got for now. Thank you all for joining me today. I appreciate y'all.