THESIS

LISTENING TO DIFFERENCE:

THE CONSTRUCTION OF INTERSECTIONAL IDENTITY IN VALORANT'S SOUND DESIGN

Submitted by

Tate Adams

Department of Communication Studies

In partial fulfillment of the requirements

For the Degree of Master of Arts

Colorado State University

Fort Collins, Colorado

Summer 2022

Master's Committee:

Advisor: Elizabeth S. Parks

Morgan K. Johnson Schroeder Evan Elkins Rosa Mikael Martey Copyright by Tate Adams 2022

All Rights Reserved

ABSTRACT

LISTENING TO DIFFERENCE: THE CONSTRUCTION OF INTERSECTIONAL IDENTITY IN VALORANT'S SOUND DESIGN

As sound studies begins to interface more prominently with communication studies, the majority of research concerns rhetorical implications of vocality and sound's potential for argumentation and advocacy. This thesis contributes towards a growing body of research that identifies sound's influence in shaping our understandings of intersectional identity by providing several examples of how analyzing mediated sound design can uncover latent discourses of cultural difference. By combining communication studies, game studies, and sound studies it begins to establish a lexicon for discussing otherwise ineffable forms of representation in immersive and interactive media.

This thesis sets out to answer two main research questions (RQs). RQ1 questions "How is player identity constructed in VALORANT through its voice communication affordances?" while RQ2 interrogates "How is intersectional identity communicated through VALORANT's sound design?" The three content chapters work in tandem to answer these research questions, and then reflect on what those answers mean for VALORANT players and audiences, scholars of games and sound, and the field of communication.

This research is useful to VALORANT's player base and the widespread audience it commands insofar as it calls to the forefront the discourses of cultural difference which undergird the game's virtual acoustic design and sound affordances. Understanding that scholars

of media, cultural studies, and communication overlap with gaming audiences, I am also optimistic that this thesis will inspire further work around sound design's potential for communicating discourses of cultural difference.

For game studies scholars, this work encourages a dedicated practice of listening *to* and *for* discourse of cultural difference in games. Sound is an often-underserved element of games in critical scholarship, and (responding to RQ2) this thesis demonstrates how much hidden meaning is embedded in the subtle details of developer's sound design choices. This study contributes to game studies scholarship by excavating the potential of virtual acoustic to represent cultural difference. Specifically, Chapters 2 and 3 demonstrate how virtual acoustic design is used to immerse players and characters within a particular diegetic context (space, place, time) in digital environments. Further, Chapter 3 also brings into focus the politics and economics of representation entailed in cosmetic accessorizing in online gaming.

For scholars of sound, this thesis exemplifies the importance of developing critical tools for understanding how audio cues are used in mediated sound design to communicate notions of intersectional identity. As a rapidly growing interdisciplinary field, sound studies scholars could contribute a great deal of knowledge towards the different ways in which representations are codified in industrial practices.

When communication studies turns its attention toward mediated sound design it is especially well-oriented to understand and critique the influence of virtual acoustic design on our conception of social reality. This study emphasizes the possibilities for rhetorical scholarship to critically assess forms of representation that are otherwise quite difficult to put words to. This thesis also exemplifies the potential of adopting vibration as a central organizing metaphor for communication theory. An acoustic approach to orientation in Chapter 2 conceptualizes sound

design as innately rhetorical, and often strategic. A vibrational reading of *stereo*type in Chapter 3 which emphasizes the ephemeral, dynamic, and immersive nature of representation. A resonant approach to access and advocacy in Chapter 1 uses the metaphor of apprehending vibration to highlight the importance of *feeling heard* in relation to representation, safety, and community.

ACKNOWLEDGMENTS

It wasn't until my 17th year of formal education that I first had an Asian teacher, and even at that I feel lucky. I talked with my mother the other day and she said that she never had a teacher that looked like her, and then I noticed a sadness that overtook her when she said she didn't even think of it as a possibility. I want to thank Dr. Elizabeth S. Parks for not only being that person for me, but for being the best possible version of that person. Research shows that less than 2% of people who graduate with an MA in Communication identify as Asian women—and trans Asian women don't even register on any of the scales I could find. Liz often talks about breaking the bamboo ceiling—and I want to thank her for all the bruises and splinters she's endured to keep pushing others through it.

I also want to thank the rest of my committee: Drs. Morgan K. Johnson Schroeder, Evan Elkins, and Rosa M. Martey for the generous time, attention, and kindness they each poured into this project.

A special thank you to Megan Bowen for feeding me information over the phone when my computer broke down in the middle of this project. Additionally, thank you to my brother Ben Monroe for introducing me to *VALORANT* and to Noah Kent for carrying me through countless online matches.

DEDICATION

For Maci, for Player 2, and for myself.

TABLE OF CONTENTS

ABSTRACT	ii
ACKNOWLEDGMENTS	v
DEDICATION	vi
INTRODUCTION	1
Approach to Inquiry	4 5
Summary of Thesis Chapters	11
CHAPTER 1. "DO YOU HAVE A MIC?" A CRITICAL AUTOETHNOGRAPHY OF VC DYSPHORIA IN VALORANT	
Why Studying (My) Trans* Leisure Matters	15
VALORANT & Vocal Dysphoria "Do You Have a Mic?" "Are You a Gamer Girl?" "Why Don't You Just Speak Up?"	18 19
Speaking Up/Losing My Voice	24
CHAPTER 2. VIRTUAL ACOUSTIC DESIGN: LOCATING AND ORIENTING THE IMAGINARY OF RACE IN THE VALORANT AUDIO SANDBOX	26
Virtual Acoustic Design, Communication, and Game Studies	28
Representation and Orientation	
Analysis Location and Locale: Listening for Temporal Orientalism in Map Design Accessorizing with Audio: Weapon Skins and Ornamentalism	32
Conclusion	43
CHAPTER 3. CONTROLLING SOUNDS: SONIC STEREOTYPING DISCOURSES IN VALORANT	45
Theorizing (Stereo)types Through Sound	47
Controlling Sounds in VALORANT Sage: The Mysticized Sounds of East Asian Comfort Women Jett: The Quiet Threat of the Mystical Ninja Sova: The Hostile Technologies of Russian Intelligence	49 52 55
Conclusion	56

CONCLUSION	58
Implications for Players and Audiences of VALORANT	58
Implications for Game Developers and Sound Designers	60
Implications for Scholars of Games and Sound	60
Implications for the Field of Communication Studies	62
REFERENCES	64

INTRODUCTION

Sound is both material (a vibration of air molecules apprehended and rendered knowable by the body) and metaphorical (a cultural phenomenon by which we ascribe meaning to noises) (Edgar, 2019; Gunn et al., 2013; Hawk, 2018; Sterne, 2012). In the introduction to their canonical book *Keywords on Sound* (2015), David Novak and Matt Sakakeeny argue that "cultural studies, communication...and media studies has deepened our understanding of the role sound plays in the formations of social difference" (p. 7). As sound studies begins to surface more prominently within communication studies, critics and theorists alike thoroughly address how sound can be used to express advocacy, organize community, and attune audiences (Edgar, 2019; Gunn et al., 2013; Sterne, 2018; Woodward, 2021). However, scholars in these fields have not yet adequately addressed the key role mediated sound design plays in the construction of intersectional identity. It is crucial that we keep pace with ever evolving innovations in sound design by developing knowledge that allows us to critically reflect on how sonic cues are used to exert influence over our understandings of social and cultural difference.

In today's hypermediated cultural landscape it is more essential than ever that we equip ourselves with the analytical tools to deconstruct and assess the representation of identity through sound design. This project ties together scholarship on listening, sound studies, critical rhetoric, new media, and game studies to analyze how audio design is used to communicate concepts of identity and difference to, about, and among players of the competitive first-person tactical shooter game VALORANT. This interdisciplinary approach enables this thesis to assess VALORANT as a cultural object which is representative of how larger social relations are constructed and maintained through

mediated sound design. That is to say, this thesis combines these strains of scholarship in order to enunciate a clearer notion of how sound design functions as a deeply political and meaningful aspect of our everyday lives.

Games studies scholars have made the political stakes of games abundantly clear (Cheong & Gray, 2011; Chess, 2017; Gray, 2012; Ruberg & Shaw, 2017; Shaw, 2015; Sicart, 2014; among many others). Many scholars have done meaningful work at the crossroads of queer theory and game studies to examine how intersectional identity implicates players in high stakes debates about representation in their play as it interfaces with their sexuality, gender, bodies, ability, and intersectional identity more broadly (Gray, 2012; Lax, 2021; Pow, 2018; Ruberg, 2020; Ruberg & Shaw, 2017; Shaw, 2015). This thesis extends this rich history of scholarship, using VALORANT as a paradigmatic case study for identifying how sound design operates as an underrecognized—and under-criticized—instrument for communicating cultural difference.

Since its launch in the Summer of 2020, the free-to-play game VALORANT has been massively popular, hosting around 14 million monthly players (Cooke & Stavropoulos, 2021). Viewership of professional esports matches is also quite popular, peaking at roughly one million concurrent viewers during the world championship tournament in May of 2020 (Cooke and Stavropoulos, 2021). While VALORANT is not necessarily a narrative-focused game, there are small bits of worldbuilding through character synopses, player-cards, and passive storytelling in the game's maps. There are currently 18 playable characters in VALORANT, each with unique abilities and each representing a particular country and culture within the game's narrative. In this thesis project, I am primarily interested in understanding how the game's design, both in terms of affordances and soundscape, is used to communicate intersectional identity.

VALORANT is a particularly useful cultural artifact to exemplify the aforementioned gaps in scholarship related to sound design and intersectional identity construction for two reasons. First, its massive popularity evidences the global impact of the game's design choices, adding to the potential harm involved in continuing to lack the analytical tools to understand how the game exerts influence over our imaginaries of difference. Second, inspired by Shira Chess's (2017) acknowledgment that "the playful is political," analyzing VALORANT demonstrates how tradition conceptions of leisure may also carry an incredibly rich payload of meaning for understanding how we formulate our understandings of cultural difference.

VALORANT is an AAA title, or what Chess (2017) would refer to as a "Player 1" designed game. That is to say, the game's target audience is idealized to enjoy fast-paced, first-person shooters with open voice communication lobbies; this idealized audience is likely cisgender, male, young, able-bodied, hearing, and most often white (Chess, 2017). In this project, I confront what it is like for "Player Two" to compete in these spaces. "Player Two," Chess explains, is "all the other players. She lacks the identity markers of Player One and is not necessarily female" (p. 30). This thesis engages with my experiences navigating a voice-chat oriented AAA videogame community as a butch, transgender, multiracial, nonbinary, woman. I offer insight to my experiences out of recognition that my presence in this space—which, like so many others, was not designed with my body and voice in mind—is an inherently political act.

Approach to Inquiry

In this section, I outline my aim for the thesis project and the research questions that drive my inquiry and inform the key concepts and terms central to this thesis project. Additionally, I overview each chapter and survey the methods that guide my analysis and the construction of the chapters.

Research Questions

The overarching aim of this project is to demonstrate how everyday mediated sound design is able to exert influence over our understandings of intersectional identity. I aim for this thesis to impact gaming audiences as well as researchers of sound, games, culture, identity. My hope is that this project can influence how we understand ourselves and others through our play. This project is guided by two primary research questions:

RQ1: How is player identity constructed in VALORANT through its voice communication affordances?

RQ2: How is intersectional character identity communicated through VALORANT's sound design?

RQ1 considers how, as Chess (2017) has theorized, games communicatively *construct* their players/desired audience. Voice communication refers specifically to the ways in which we communicate via voice chat, rather than written text or other contextual communication tools in gaming. Given the centrality of voice communication and the emphasis on precision audio in the genre of tactical shooters, RQ1 confronts how these affordances interface with VALORANT's designed/intended audience compared to its actual player base. This research question addresses the overarching aim of this project by demonstrating that the games we play not only convey information about identity *to* us but also *about* us.

RQ2 emphasizes sound design's role in constructing identity in new media. It builds on a growing body of research dedicated to examining how sound is used to produce, marshal, and maintain conceptions of race, gender, nationality, and identity more broadly conceived (see for example Edgar, 2019; Eidsheim, 2019; Frischherz, 2018; Sano-Franchini, 2018; Stoever, 2016). This research question addresses the overarching aim of this project by highlighting the capacity

of—at times quite subtle—audio cues to communicate fundamental ideas about social and cultural difference.

Through the case of VALORANT both research questions guide inquiry into how audio design is used to communicate concepts of identity and difference to, about, and among players as grounded in scholarship tied to listening, sound studies, critical rhetoric, new media, and game studies.

Key Concepts and Terms

In this section, I define key terms and concepts grounding this thesis project: *vocality*, *passing*, and *racialized imaginaries*. These concepts are woven throughout this study, and adopting an early understanding of the ways I define and use them enables the interdisciplinary audience for this thesis to operate on a shared vocabulary for speaking about identity construction over the duration of this discussion.

Vocality: Vocality can be understood as the nonlinguistic or paralinguistic aspects of the human voice. In other words vocality is the texture of our talk, or what Roland Barthes (2009) famously called the "grain of the voice." In her book *The Race of Sound: Listening, Timbre, and Vocality in African American Music* (2019), Nina Sun Eidsheim argues that vocality carries socially constructed and culturally derived significance "by which the whole of the person [is] taxonomized" (p. 4). In the context of voice chat in online games, these stakes can be felt by Player Two, like myself. When strangers hear my voice in virtual space, who they envision on the other end has tangible effects on their attitudes and actions towards me. Vocality plays a key role in this thesis as it is one way by which the intersectional identities of VALORANT's players and characters are constructed and codified.

Passing: Passing concerns how others perceive our ascribed identity as matching (or not) with our avowed identity. While passing has previously been understood by rhetorical scholars as a question of "duping" or "tricking" certain audiences (Morris, 2002; Squires & Brouwer, 2002), a far more generative approach is to consider why a speaker may wish to pass or not. I speak from my position as a butch transgender woman who does not seek to pass in the traditional sense. I speak from a position of someone who respects the choices of those who might choose of their own accord to undergo hormone replacement therapy or vocal feminization therapy, but also I also speak—inspired by the radical trans affirmative politics of Dean Spade (2015), Susan Stryker (2017), and Leslie Feinberg (1996)—from the position that rejects the notion that passing and inclusion are the only viable route to a fulfilling and sustainable life as a transgender person. In particular, I am critical of how "such goals undermine the disruptive potential of trans resistance and also threaten to divide potential alliances among trans people," providing "nothing more than adjustments to the window-dressing of neoliberal violence that ultimately disserve and further marginalize the most vulnerable trans populations" (Spade, 2015, p. 12). Passing plays a fundamental role in my personal experience playing VALORANT as well as how audiences understand the sound design of the game's characters.

Racialized Imaginaries: While I use the term imaginaries to evoke media theorists' longstanding claims that, in the contemporary hypermediacy of the global media economy, understandings of difference are necessarily grounded in the "imagination as a social practice" (Ang, 2001; Appadurai, 1990, p. 31; Attali, 1985), I also recognize the irony and limits of using theoretical terminology steeped in the visual root of the *image*. Jennifer Lynn Stoever's (2016) scholarly work to trace "the sonic color line" not only serves to historically locate the significance of sound in the construction of difference in popular U.S. American understanding,

but it also uncovers the durable audio-visual linkages between the racial gaze and the listening ear. In this way, she demonstrates to us that imaginaries—or "mechanically produced images" in the sense of the Frankfurt School (Horkheimer, 1972)—are often sound-tracked; and that these sound-tracks of everyday life are often imbued with a "distortion caused by white supremacist ideology" that implicates serious political considerations in terms of the emotional, psychological, social, and material wellbeing of people of color (Stoever, 2016, p. 76). I make use of the term "racialized imaginaries" in this thesis in order to understand and critique how media encourages audiences to envision racial differences.

Each of these terms—vocality, passing, and racialized imaginaries—are central concepts to the emergent narrative in this thesis. Conceptually, they also call for the use of specific types of research methods that offer means to investigate their enactment in my chosen cultural object of inquiry. In the following section, I explicate my multimethod qualitative approach and how it is uniquely tailored to interrogate the construction of intersectional identity in mediated sound design.

Research Methods: Sound Rhetoric and Autoethnography

In order to analyze VALORANT as a cultural object, this thesis utilizes two primary methods: rhetorical analysis and autoethnography. Binding these two approaches together is listening: listening *to* (myself and others; professionals and amateurs; the characters and spaces they inhabit) and listening *for* (conceptions of difference, stereotypes, strategic communication, orientation, etc.). Across the entirety of this thesis project, I engage with literature on listening to formulate a strategy for audiences and critics to resist the over-simplification of social and cultural identity in sound design. Below I have outlined what a rhetorical analysis and

autoethnography of sound uniquely offer to this project, briefly describing how they contribute to the thesis chapters.

Sound Rhetoric

Sound can be approached both as an object *of* and method *for* rhetorical scholarship.

Recent scholarship on the rhetoric of sound takes audio as the object of its study in order to illuminate sound's underexamined cultural influence and latent persuasive potential (Stoever, 2016; see also Edgar, 2019; Eidsheim, 2019; Woodward, 2021). Further, a contingent of scholars at the intersection of sound studies and critical/cultural studies have emphasized the potential for using sound as the central metaphor for theorizing rhetoric (Cesaro, 2018; Hawk, 2018; James, 2019)—this latter, growing body of work is what I refer to as sound rhetoric. This project implements both of these conceptions of sound to formulate an understanding of the political tenor of VALORANT's sound design.

Each chapter in this thesis approaches sound as an object of rhetorical study, though the implications of those approaches vary a bit. In Chapter 1, I explore how sound interfaces with embodiment and digitality to convey gender identity between players. Chapter 2 expands our critical consideration of acoustics into the virtual domain to produce knowledge about how industrial choices in sound design operate to produce racialized imaginaries about different points on the globe. Chapter 3 engages sound's capacity to convey stereotyping discourses, which have traditionally been rendered exclusively to the domain of the textual and visual.

Placing sound as the central organizing metaphor for theorizing rhetoric also uncovers unique opportunities for inquiry in this project. Chapter 1, for example, consider silence as a relative principle and confront the associated politics of exclusion, which players who embody intersectional identities must navigate in their everyday lives. Chapter 2 blends the study of

sound with extant literature on the rhetoric of space and place to theorize the (digital) acoustic of power and representation. Chapter 3 further dislodges the textual and visual as the functional metaphor for theorizing rhetoric by investigating the ways in which sound better represents the nature of stereotyping discourses. As an ephemeral, immersive, and embodied force, an interrogation of sound is especially well equipped to yield insight into the fleeting, chaotic, and experiential ways in which stereotyping discourses function in our day-to-day lives.

Autoethnography

Qualitative researchers, and communication scholars in particular, have argued in recent years that the autoethnographic method offers a compelling challenge to canonical ways of thinking, teaching, and doing research by interrogating how the sharing of personal experience can be used to explicate unique social, cultural, political, and historical knowledge (Chuang, 2020; Eguchi, 2015; Ellis et al., 2010; Hernández & Munz, 2021). Shinsuke Eguchi (2015) claims autoethnography as a "radical method to disrupt normative systems of knowledge productions to investigate historically marginalized experiences" (p. 9). Novak and Sakakeeny (2014) argue that ethnography offers sound studies "an ear into the expressive, embodied, and participatory relationships with sound as it unfolds into powerful articulations of particular selves, publics, and transcultural identities" (p. 7). Autoethnography is also well tailored to the task of uncovering knowledge about particular digital cultures. Donal Carbaugh (2007) argues that ethnography allows researchers to attend to the distinct ways in which identity and relationality are constituted in different online contexts due to the particular linguistic resources available for communication within various media.

Ethnographic methods have been fruitful for game studies scholars. In his book *Coming* of Age in Second Life: An Anthropologist Explores the Virtually Human (2015), Tom Boellstorff

applies anthropological methods to conduct ethnographic research of residents of the game Second Life. Boellstorff's work uncovers aspects of virtual culture such as identity maintenance and management, as well as the creation of space and time in the digital world. Additionally, in an article titled "Intersecting oppressions and online communities: Examining the experiences of women of color in Xbox Live," Kishonna L. Gray (2012) utilizes ethnographic methods to explore the intersecting oppressions faced by women of color in mainstream online gaming. In particular, Gray examines how women are linguistically profiled in online gaming lobbies based on the sound of their voices. Gray (2012) also posits that women often respond by forming online clans or parties with other women to help support one another in what can be otherwise hostile online gaming spaces.

My cultural immersion in gaming as a participant and a critic means that the topics confronted in this thesis pervade my everyday experiences. Following DL Stewart (2017), the autoethnographic approach of Chapter 1 establishes that I engage in "research as a part of the life process" wherein I am conducting "research inquiry and analysis for the purposes of living" (p. 286). As such, the purpose of implementing autoethnography as the method of inquiry in Chapter 1 is to position myself—as a butch/non-binary transgender Asian American woman—within and in relation to VALORANT as the artifact and community of focus for my research. In particular, using autoethnography as a research method in this space enables me to communicate how I make sense of the rejection of the dominant logic of passing while navigating the social and culturally significant ways in which it constructs our listening practices.

Utilizing the method of sound rhetoric also means using vibration as a central organizing metaphor for rethinking the ways in which we communicate identity. Combining sound rhetoric with autoethnography enables me to do so with the critical inflection of my positionality as a

researcher. Entailed in this coupling is the difference between "seeing" oneself represented and "feeling" represented. I specify "feeling" here, as sound vibrations are apprehended with the whole of our bodies—representation, too, is a holistic process and immersive feeling. It's not enough to see ourselves represented (or not) on the screen, what matters is how we internalize those representations and in what ways they innerve our bodies, minds, and hearts. In the following section I outline the proposed chapter content of this thesis.

Summary of Thesis Chapters

This thesis project tells the story of listening to difference and the construction of intersectional identity in VALORANT's sound design. Together, these chapters speak to the different ways in which sound cues orient us to concepts of race, gender, sexuality, nationality, space, and place; as well as how these concepts overlap and harmonize to produce more holistic imaginaries of intersectional identity. This project aims to equip audiences and critics with the analytic tools to deconstruct how these complex and interwoven relationships of power and identity are communicated through sound design. Accordingly, this thesis is comprised of this introduction, followed by three content chapters and a conclusion. I outline the chapters to follow below.

CHAPTER 1. "DO YOU HAVE A MIC?" A CRITICAL AUTOETHNOGRAPHY OF VOCAL DYSPHORIA IN VALORANT.

This chapter intervenes within conversations about vocality, passing, and silence at the intersection of transgender studies, game studies, and communication studies. Using a critical autoethnographic approach I consider the ways in which the promise of livable trans* life is stymied by dominant narratives of passing and medicalization. I seek to further answer RQ1 by reflecting on my experiences with vocal dysphoria as a butch/non-binary transgender Asian

American woman navigating the expectations imbedded in *VALORANT*'s voice chat affordances and culture. In particular, I emphasize the importance of critical/cultural perspectives which reject the normative notion of passing and resist the medicalization of trans* identity in the production of meaningful knowledge and research on transgender vocality.

CHAPTER 2. VIRTUAL ACOUSTIC DESIGN: LOCATING AND ORIENTING THE IMAGINARY OF RACE IN THE VALORANT AUDIO SANDBOX.

This chapter analyzes how VALORANT's virtual acoustic design signals to players certain concepts of location, locale, and economic development. I contend that the game's design orients players to the acoustics of racialized soundscapes through passive and (inter)active environmental sound cues and cosmetic audio accessories. Beginning with a distinctly more industrial focus than the other chapters in this thesis, Chapter 2 addresses RQ1 by exploring the rhetoricity of VALORANT's virtual acoustic design. Chapter 2 investigates how sounds are mapped into the architecture of the VALORANT maps and the aesthetics of its cosmetic accessories, as well as how these aspects combine to communicate discourses of cultural difference. Seeking to answer Herman Gray's (2017) call for contemporary media scholars to "track down and connect... the social basis of knowledge and truth of race," (p. 164) I identify how audio serves a key role in formulating contemporary imaginaries of race and extend our understanding of how sound cues function to secure a social order of white U.S. American dominance.

CHAPTER 3. CONTROLLING SOUNDS: LISTENING FOR STEREOTYPING DISCOURSES IN VALORANT.

Inspired by the work of Patricia Hill Collins (1999) on "controlling images" within visual media, I coin the term "controlling sounds" to describe how stereotyping discourses are injected

into—and maintained within—the public imaginary through sound design. I address how sound design is used to strategically execute certain social, cultural, and political functions to communicate notions of the Other through sonic stereotyping discourses. I seek to answer RQ2 by analyzing how the sound design of three characters serves to communicate historically significant and reductive aspects of their nationality, race, and genders. I adopt the methodological approach of sound rhetoric in order to explicate how using vibration as our primary metaphor for understanding stereotyping discourses supplies critics with analytical power to assess them in new forms. Sound and vibration (as ephemeral, immersive, and embodied) are uniquely well suited as a metaphors for understanding stereotyping discourse, and attentive listening practices can offer a critical resistance to controlling sounds' influence.

CONCLUSION

This conclusion chapter examines how the content chapters work together to answer the RQs set out in this introduction. To reiterate, RQ1 asks, "How is player identity constructed in VALORANT through its voice communication affordances?" RQ2 interrogates, "How is intersectional identity communicated through VALORANT's sound design?" In addition to assessing how the content chapters operate in concert to answer these research questions, the conclusion reflects on what those answers mean for VALORANT players and audiences, scholars of games and sound, and the field of communication.

CHAPTER 1. "DO YOU HAVE A MIC?" A CRITICAL AUTOETHNOGRAPHY OF VOCAL DYSPHORIA IN VALORANT

Whereas the following two chapters of this thesis are concerned with *listening to*VALORANT, this chapter first addresses what means *to be heard* within this space. This chapter responds primarily to RQ1: How is player identity constructed in VALORANT through its voice communication affordances? Addressing the disconnect between VALORANT's idealized audience and who actually plays the game, this chapter stakes several critical interventions within the extant literature on transgender voice by engaging in a humanistic research effort that seeks to offer reprieve from the medicalization of trans* identity in research. Inspired by Shira Chess's (2017) acknowledgment that "the playful is political," this chapter engages with my experiences navigating a voice-chat oriented AAA videogame community as a butch, transgender, multiracial, nonbinary, woman. I offer insight to my experiences out of recognition that my presence in this space—which, like so many others, was not designed with my body and voice in mind—is a political act. This autoethnography offers an understanding of transgender vocal dysphoria from a perspective that rejects the normative logic of passing.

I am a transfeminine person and I do not undergo hormone replacement therapy (HRT), nor do I have any plans of doing so. As with my body, I have not nor do I plan to undergo therapy to alter my voice in the interest of passing. I would not describe myself by the common nomenclature as "pre-op," because gender affirming operations are not in my desired future. Instead, I attempt each day to carve out a life that is livable as a butch, non-binary transgender woman. I offer these details of myself in the interest of resisting the dominant narrative that to be a transgender woman is inherently to be hyperfeminine, to seek out HRT and gender affirming surgeries, and to desire to be assimilated into cis-womanhood. This does not mean, of course,

that I am exempt from the struggles of perception that confront virtually all transgender people. I use videogames as an outlet for confronting what transgender vocal dysphoria might look and sound like beyond the desire to "pass" in the traditional sense.

Why Studying (My) Trans* Leisure Matters

Nearly all of the available literature at the intersection of transgender identity, dysphoria, and the voice is concerned with clinical knowledge of transgender *patients*. I emphasize the word *patients* here to draw attention towards the disproportionate availability of literature that supports the medicalization of trans* identity. Surely competent and accessible medical care is an underrealized necessity for transgender people everywhere, but it is also hazardous for research to conceptualize of transgender people exclusively as *patients*. Perhaps the paramount danger is that without dissenting voices—methodologically, topically, politically—an overly medicalized epistemology of transgender people risks condensing the will to produce livable trans* life into a homogenized notion of "good practice."

The vast majority of these articles are focused on developing a base of knowledge about behavioral and neural relationships between transgender patients and their voices for the purposes of gender affirming speech therapy. These articles are well intentioned, no doubt, in attempting to create knowledge that enables transgender patients to access therapeutic strategies that might help them to more consistently be perceived as their avowed gender identity; but in doing so, they risk reducing livable trans* life exclusively to the domain of passing.

Additionally, an over-representation of transgender people as *patients* in research runs the peril of reifying a dangerous tendency with deep roots in the disciplines of psychology and psychiatry of pathologizing trans* identity. As Jacob E. Perlson, Oakland C. Walters, and Alex S.

Keuroghlian (2021) write in their article "Envisioning a future for transgender and gender-

diverse people beyond the DSM," "While the change from a diagnosis of 'gender identity disorder' to one of 'gender dysphoria' in DSM-5 represented psychiatry's increasingly affirming stance towards TGD populations, complete depathologisation—uncoupling gender diversity from the stigma of diagnostic classification and clinical practice suggesting illness or disorder—remains a necessary and worthy goal for our field to work towards" (p. 471).

Thus, I encourage us to reflect on the rife politics that burgeon at the intersection of trans* identity, leisure, and online community. First, it is crucial to understand the ways in which trans* leisure often emerges in a unique state of precarity. Trans* leisure time is constantly ruptured from the exterior by an unyielding news cycle of individual acts of hate-motivated violence and state-sanctioned attempts to abridge the rights of trans* citizens. At the same time, trans* leisure can be fractured from the interior by both individual or structural acts of exclusion.

Second, contemporary trans* leisure is intimately connected to the internet. A 2021 study titled "Digital Media Use Differs Between Transgender and Cisgender Youth" finds that not only are transgender, non-binary, and gender diverse (TNG) youth more likely to use digital technology to explore their identity, but increased internet access and use is actually correlated with positive body image and overall well-being—while the inverse is overwhelmingly the case for cisgender youth (Allen et al., 2021). Speaking from personal experience, spending leisure time online allows for access to an ostensibly safer refuge, containing space for sociality without the dangers or exhaustion that come with public perception as a gender diverse person.

Finally, it can certainly be argued that trans* self-care and leisure is inherently political. As Audre Lorde writes famously in *A Burst of Light* (1988), "Caring for myself is not self-indulgence, it is self-preservation, and that is an act of political warfare." Under the regime of cisheteropatriarchy society, it is important for transgender, non-binary, and gender non-

conforming people to care for ourselves. In a similar manner, I write autoethnographically not out of an inflated sense of self-importance but as an exercise in politics and survival.

Qualitative researchers, and communication scholars in particular, have argued in recent years that the autoethnographic method offers a compelling challenge to canonical ways of thinking, teaching, and doing research by interrogating how sharing personal experience can be used to explicate unique social, cultural, political, and historical knowledge (Chuang, 2020; Eguchi, 2015; Ellis et al., 2010; Hernández & Munz, 2021). Eguchi (2015) claims autoethnography as a "radical method to disrupt normative systems of knowledge productions to investigate historically marginalized experiences" (p. 9). Moreover, autoethnography is particuarly well tailored for the task of uncovering knowledge about particular digital cultures. Donal Carbaugh (2007) argues that conducting ethnography of digital communities allows researchers to attend to the distinct ways in which identity and relationality are constituted in online contexts due to the different linguistic resources available for communication within various media.

As such, the purpose of this inquiry is to outline how I—as a butch/non-binary transgender Asian American woman—make sense of the rejection of passing while navigating the social and culturally significant ways in which it constructs our listening practices. My cultural immersion in gaming as a participant and a critic means that vocality, passing, and silence pervade my everyday experiences. Following DL Stewart (2017), this autoethnography engages in "research as a part of the life process" wherein I am conducting "research inquiry and analysis for the purposes of living" (p. 286). In the following section, I assess my experiences playing VALORANT through three questions that I am often asked by my teammates in games. I

weave my own lived experiences together with scholarly theory to help elucidate what it is like to be trans* in these spaces.

VALORANT & Vocal Dysphoria

"Do You Have a Mic?"

We are defending and I am alone on B site. I trade a kill with the enemy team but gain a clear idea of where they are maneuvering in the process. All four of the remaining enemies are rushing through the tunnel in B Main to get onto site. I type to my team "all B" and ping for assistance on the map. It takes my team some time to notice my typed message, and they are a bit too late to retake the site before the bomb detonates. We lose the round.

"Do you have a mic?" asks one of my teammates.

I do, and I know that using it would help my team to more quickly act upon the intel I gathered earlier in the round.

"Hello? Mic?" they inquire again.

I don't respond.

Voice communication offers a strategic depth and immediacy to the play of VALORANT. It offers a chance for collaboration with my team, and I am confident in many situations that it would increase the probability of us winning. Something keeps me from speaking up though. How will they perceive my voice? Will they refer to me as "man" or "bro" for the rest of the game? It wouldn't bother me *that* much if they did, but enough that I choose not to say anything. They might be receptive to the fact that I'm not a "man" or a "bro," too. But then again, maybe they wouldn't be. Either way, it's probably too complex of a conversation to

have with a random one-in-fourteen-million player that I was paired with in matchmaking and will likely never encounter again in my life.

Instead of focusing on winning my ranked match, I am left thinking through my relationship with voice dysphoria for the remainder of the game.

"Are You a Gamer Girl?"

In anonymous game lobbies with essentially no identifying information, people tend to start conversations based on usernames/gamertags. I use two different VALORANT accounts, switching between the two when I play with friends versus when I play on my own. On one account, I use an identifiably Korean username. On this account, I receive common iterations of a question along the lines of: "How do you pronounce your gamertag?" On my other account, my name implies that I am a girl. Then, the question I get more often than not amounts to something like: "Are you a *gamer girl*?"

When I type in the chat, "Yep" or "I suppose so," another question predictably follows: "Do you have a mic?"

It's certainly not misleading to tell these players that I am a gamer girl; I am a girl, and I game pretty regularly, after all. Nevertheless, I don't want them to garner the wrong impression just from the register of my voice.

"Broken rn, sorry!" I type back without fail.

Nina Sun Eidsheim (2019) begins her book *The Race of Sound: Listening, Timbre, and Vocality in African American Music* with an introductory chapter about what she calls "the acousmatic question." Regardless of the context in which a vocalizer is heard, Eidsheim contends that "the foundational question asked in the act of listening to a human voice is *Who is*

this? Who is speaking?" (2019, p. 1). We do not only ask the acousmatic question to find out where someone is speaking from, but we "actually assign value when we pose and respond to the acousmatic question" (p. 13). Gender is a common heuristic by which we assign that value. Consider, what a "woman's voice" sounds like to you. This may be different for those who are close to me, and people like me, than popular consensus in research would indicate. Generally, research indicates that cisgendered women's voices are assumed to fall somewhere in an average range of 165 to 255 Hz while cisgendered men's voices are assumed to be somewhere between 85 and 155 Hz (see for example: Re et al., 2012; or Watson, 2019). In reality, gender is not quantifiable in such discrete fashion. Plenty of cisgendered and transgendered women's and men's voices fall outside of these ascribed range of frequencies, and nonbinary and gender nonconforming people have voices that fall all along this spectrum. Nonetheless, the dominant logic of passing requires that we interpret theses voices as exceptions or anomalies to be reconciled, rather than reconsider the whole taxonomical system.

Kishonna L. Gray's work has been innovative in exploring how women confront, resist, and respond to ascribed classification based on their voices in online gaming. In the article "Intersecting oppressions and online communities: examining the experiences of women of color in Xbox Live," Gray (2012) explores the intersecting oppressions faced by women of color in mainstream online gaming. In particular, Gray examines how women of color are linguistically profiled in online gaming lobbies based on racialized and gendered assumptions of voice.

Following Gray's work, I explore how my trans* voice is (mis)perceived.

My voice may not fit the common imaginary, but it is no less a woman's voice. Still, I am left with hesitation to speak to strangers. What might they imagine of my character—who this is, who is speaking—simply from the register, tone, and resonance of my voice. To be clear, I

grapple with these problems of perception, but I do not desire to *change* my voice. Rather, I want to push the unimaginable onus back to every other hearing person to recalibrate their ears. It seems ridiculous that the whole of society might bend their ears to reimagine their relations to gender, but this is the type of impossibly hopeful thinking that I am inspired to do by the radical queer potential that José Esteban Muñoz (2009), Leslie Feinberg (1996), and Dean Spade (2015) each reach for in their scholarly works. In assessing how VALORANT's voice communication affordances construct audiences, it is important to consider affordances as not only the technology players may utilize, but also why they may choose to use (or not use) what is available to them.

"Why Don't You Just Speak Up?"

While I certainly have the equipment—both anatomically and mechanically—to break silence and vocalize myself to my team in VALORANT, the question of voicing myself is not one of ability but of access. Access is characterized by more than just ensuring a physical infrastructure that is capable of servicing the needs of people in a particular space. It also means ensuring that said infrastructure can be and *is* used. For example, in "Disability Parking Spots Yet to Be Filled," Amir Haji-Akbari (2018) reflects on the emptiness of disability parking spaces at America's top universities. "It is not enough for universities to set aside parking spaces for faculty members with disabilities. They should also take meaningful steps to fill each of those spots." It is not enough for the physical infrastructure to exist to service people's needs; people also have to be included to make use of the infrastructure.

Access is socially constructed, but that does not mean it is immaterial. Robert McRuer (2006, 2019) argues that queerness and disability are woven together by the question of access through a neoliberal logic that produces systems of compulsory able-bodiness and compulsory

heterosexuality. Building on Michel Foucault's work, McRuer posits that in a fetishized pursuit of normalcy, individual autonomy is appropriated to reduce difference into profitable versions he calls "corporate queer identity" and "corporate disability identity," which overemphasize "fixing" inaccessibility. This neoliberal logic pursues normalcy so fiercely because, if infrastructural barriers are (at least optically) fixed, queer and disabled people can bear the blamefor inaccessibility based on their own individual choices.

A journal entry from my time as an undergraduate student reminds me of how I often have refused to utilize ostensibly accessible resources in my everyday life. Having completed my undergraduate studies at a small liberal arts college, it was not uncommon for all of my humanities and social science classes to be held in the same building. The Administration building was the "big tent" on campus under which English creatives, methodical historians, and neurotic political scientists came together. During my time at the university, there were eight bathrooms in the administration building: four on each floor, two men's and two women's. As a trans* student still trying to make sense of my identity, I didn't find any of the restrooms hospitable. But, this was not because the physical architecture prevented me from using any of the restrooms. As Megan Hofmann et al. (2020) argue in their paper "Living Disability Theory: Reflections on Access, Research, and Design," the overemphasis on "problem solving" fails to capture the whole relationship between technology and access. Surely, the toilets in the men's restroom would not come to life and refuse, defiantly, to flush for a woman; nor would the sinks in the women's restroom refuse to rinse my hands because I was still unsure/uneasy about using the label for myself. Access isn't just about how we can get water to flow through various porcelain vessels, though.

I don't find it necessary to go into immense depth here on the politics of trans* bathroom dilemmas, but let it be said that these are not merely issues of identity, but issues of safety—and issues that are not unique to my experience. In fact, nearly 60 percent of surveyed transgender Americans report avoiding using public restrooms out of fear of confrontations, harassment, and assault (Trotta, 2016). Access is also the changes we make in ourselves because access won't work for us.

For a few semesters, I found myself with back-to-back classes in the administration building, whose eight bathrooms were perfectly "usable" to me—at least, to the extent that restrooms at any university are—and still were far from "accessible." But nor can access be reduced to a question of use or disuse. The closest gender-neutral restroom was about a tenminute walk to another building, then another ten-minute walk back. Not a terrible situation for myself, besides the turnaround between classes being only 15 minutes. I was habitually late for class as a result. Access is also where we can't be at the same time as others, and the things we miss as a result. Over the course of multiple semesters, my body and behavior began to adapt. I stopped carrying a water bottle to class. Hydration may equal more effective executive function, but hydration also equals needing to relieve yourself. Access is also the changes we make in ourselves to make what we have work for us.

This is not to diminish, however, the necessity for much needed accessibility changes within online videogames. While VALORANT's voice chat is not entirely accessible to me, I recognize that in other ways the game is designed exclusively for able-bodied players like

myself. Steve Sailor (2020), a contributor for the website on video game accessibility caniplaythat.com, does not recommend VALORANT for disabled gamers. VALORANT offers little in terms of accessibility features as it requires a strict keyboard and mouse gameplay setup, lacks essentially any system for visualization of game audio, has a very limited ping system for team communication, and does not include speech-to-text or text-to-speech options for voice chat (Baker, N.D.). Most recently, Riot Games has come under fire for its refusal to allow players to utilize other controllers or touchpads. "I have a muscular disability which means that I am unable to use a mouse, instead I have to use a touchpad," says Twitter user @DeadlyPG; to which VALORANT's support team simply responded, "Touchpads are not supported because they are not optimal for competitive shooter games" (Bevan, 2022). Clearly, much work is needed to make VALORANT a more accessible space. My hope is that this work can be done, and that in the process it is not lost upon developers or the online gaming community who it is being done for, by, and with. So far, I've discussed why I am apprehensive about being heard effectively losing my voice within different spaces, whether it be online gaming or my undergraduate university. In the next section, I expand upon how losing one's voice can also be an important practice in community and resistance.

Speaking Up/Losing My Voice

Patricia Hill Collins writes that, only in spaces wherein we can "speak freely," can we meaningfully resist the forces of hegemony and domination (1999, p. 111). It feels oxy/moronic to me that I can't speak out in a videogame lobby. After all, I am an accomplished, competitive debater and an instructor of public speaking at a major university. I know how to speak up for myself; I believe in my convictions and am confident in my ability to defend my reasoning and my willingness to engage in meaningful conversation.

The heat of the pavement is sweltering. We've been marching and pushing against barriers for days across Seattle. Tear gas, flashbangs, and rubber bullets have been deployed against our community, but we refuse to back down until meaningful concessions are made.

Outside of a boarded-up business, candles burn at a makeshift shrine to George Floyd, Brianna Taylor, Manny Ellis, Tony McDade and too many others who have fallen victim to police brutality across the country. We set off to march and protest organizers lead chants.

I can show up and out, bring food and medical supplies to support the protest efforts, offer help wherever I can, but for the past few days I've been struggling to get the words to rise from my gut when these chants come out. Every one of my cells burns with the need to speak out against injustice alongside my community. I mouth the words to the chants under my mask, but it's like someone has wound the volume knob down to the lowest setting. My diaphragm swells with air and shame as I attempt to will more projection from my chest. I think of Tony McDade and how privileged I am to have air in my lungs and his name in my mouth. With a deep voice, I shout as loudly as I can for the rest of the march and those to follow. My voice is gone by the end of the week.

CHAPTER 2. VIRTUAL ACOUSTIC DESIGN: LOCATING AND ORIENTING THE IMAGINARY OF RACE IN THE VALORANT AUDIO SANDBOX

When players dial in their headsets to begin a match of VALORANT, they are immersed in a virtual acoustic environment which operates in ways that are fundamentally different from the real world—differences that are brimming with intentionality and ideological meaning. Audible gusts of wind billow in a focused trail behind characters as they dash with superhuman speed, the vast wonder of the astral plane is refined to a tight ping as characters call upon stars to aid them in battle, and so on. Beyond the clearly fantastical elements of VALORANT's world, however, the game also departs from the realistic operation of acoustics in ways that assist in clear and objective oriented gameplay. For example, voice chat is restricted to a player's own party and/or team. Whereas in the real world, someone's status as an ally or friend is irrelevant to whether they hear you speaking just around the corner, VALORANT completely isolates teams from hearing one another's voices. Regardless of how close you may be to opposing players or how loud your voice inputs are, in VALORANT only your allies will hear what you have to say. Similarly, no matter how distant you may be from your allies, across the map or even dead, your party/team will still be able to hear you in voice chat. The siloing of voice chat has several ostensible purposes. It provides the opportunity for more tactical gameplay clarity, enhancing the strategic element of VALORANT's gameplay by encouraging open dialogue amongst team members while at the same time avoiding overcrowding its soundscape with a cacophony of voices. It also services the game's us-versus-them mentality, operating to dehumanize opposition by stripping them of voice while amplifying comradery amongst friendlies.

VALORANT's virtual acoustic sandbox is deliberately designed for players to orient themselves in three-dimensional relation to the location of other players (both on friendly and

opposing teams), their unique character abilities and loadouts (what abilities have been used and what weapons each agents are using), and key gameplay objectives (locating the spike and identifying how long until it detonates). These sound cues combine to give a cohesive and immersive sense of what is happening in the game at any time, relaying fundamental tactical information with which players are empowered to make more informed strategic decisions.

Some agents' ability sounds are purposefully designed to disrupt this proprioception for enemies as well; characters utilize an array of abilities, including sounds that are designed to mask (Raze/Sova), disorient (Breach/Skye), and misdirect (Yoru/Omen) opposing players' tactical perceptions. Most importantly, it is clear that each element of VALORANT's virtual acoustic design incorporates a high degree of intentionality, thus an abundant potential for rhetoricity.

Considerations of racial and cultural difference are embedded in the very fabric of VALORANT's virtual acoustic design. In this chapter, I contend that VALORANT's virtual acoustic design communicates notions of national, cultural, and racial identity through ambient and interactive sound cues in its maps, as well as through the thematic sound design of purchasable weapon skins. Chapter 2 primarily addresses RQ2 by investigating how intersectional identity communicated through two interactive elements of VALORANT's sound design: maps and skins. In the larger context of this thesis, this chapter demonstrates how virtual acoustic design functions to establish the basis of knowledge and truth around race.

I begin by introducing the existing literature on virtual acoustic design as it relates to communication and game studies before offering a brief description of my methodological approach to representation and orientation. Next, I analyze two examples of VALORANT's map design as case studies for how temporal Orientalism is communicated through virtual acoustic design. I then analyze several examples of how the virtual acoustic design of VALORANT's

purchasable weapon skins communicate notions of individual identity and reduce Asian identity to a portable stylistic category.

Virtual Acoustic Design, Communication, and Game Studies

The majority of extant literature on virtual acoustics exists outside of the disciplines of game studies or communication studies. Of the literature available from a wide-net search of scholarly databases, almost all existing literature discusses virtual acoustics in terms of its relevance to electrical and acoustical engineering (see for example Florian et al., 2020) or the execution of virtual acoustics in creative applications such 3D rendering in music and theatre production (see for example Howard, 2015). Virtual acoustics remain, however, an important concept for understanding how sounds are used to communicate information to audiences and orient them in the digital world.

Virtual acoustics is an interdisciplinary practice which incorporates elements of physics, technology, psychology, history, and arts. I choose the term "practice" to draw attention to the fact that virtual acoustic design does not occur naturally; rather it is something people *do* and, as a representational art, is something that people can improve upon. The earliest published use of the term "virtual acoustics" is in a 1965 article entitled "End-fire array of virtual acoustic sources produced by the interaction of cylindrically spreading acoustic waves," in which the authors discuss their findings from an experimental study of the interaction of cylindrically spreading acoustic waves in water (Berktay & Smith, 1965). More contemporary publications focus on the mechanics of virtual acoustics in the production of immersive virtual reality (e.g. Segura-Garcia et al., 2019; see also Vorländer, 2020) and the importance of virtual acoustics in 3D mapping (Forget et al., 2016). Interestingly, a recent article titled "Virtual acoustic reconstruction of the Miners' Theatre in Idrija (Slovenia)" explores the potential for virtual acoustic models to be used

to reconstruct otherwise lost historical architecture and acoustics (Tronchin et al., 2021). Virtual acoustics is becoming increasingly influential in rendering space and place within a vectorized plane of time. When virtual acoustics create a certain context (place, space, time), they also have the power to communicate aspects of culture as tied to that context. This is especially important to consider in this study so that we can formulate a critical vocabulary for assessing how virtual acoustics influences our comprehension of social reality.

From virtual acoustics' earliest intersections with mass communication studies, it has been used as a powerful instrument for orientation. The only known instance of an article with direct discussion of both "virtual acoustics" and "communication" is a 1998 article titled "Virtual acoustics, aeronautics, and communications" published in the *Journal of the Audio Engineering Society* (Begault, 1998). In this article, the author discusses an optimized approach to auditory display design for commercial aircraft, which utilizes three-dimensional spatialization and active noise cancellation for improved flight orientation and safer aeronautical operations.

While struggling to find a home in communication studies, virtual acoustics has had slightly more engagement from scholars of game studies. In a dissertation titled "The acoustic ecology of the First-Person Shooter," Mark Grimshaw (2007) describes how players' perceptions of virtual acoustics interface with the affordances of games, real world spaces, and the perceptions of other players in a multiplayer setting to formulate a "virtual acoustic ecology" (p. 252). In a section of *The Oxford Handbook of Interactive Audio* entitled "Embodied Virtual Acoustic Ecologies of Computer Games," Grimshaw and co-author Tom A. Garner (2014) expand this work to formulate the embodied Virtual Acoustic Ecology (eVAE) model. The eVAE model seeks to explain how acoustic design interacts with psychology and neuroscience to produce a more immersive virtual sonic environment. Understanding virtual acoustics in games

as inherently dynamic and fundamentally relational enables this study to further interrogate how discourses of cultural difference are communicated through VALORANT's sound design. Furthermore, conceptualizing virtual acoustics as a sophisticated immersion technology both emphasizes its influence on audiences and highlights the importance of adopting an adequate vocabulary for critically analyzing representations of difference in virtual acoustic design.

While the interdisciplinary history of virtual acoustics may at first tempt the idea that it has been built as a holistic practice, it is clear that its failure thus far to establish a foothold in the humanities has left broad gaps in knowledge. While we understand how virtual acoustics work from a scientific standpoint (understanding *what it is*) and a creative point of view (understanding *how to make it*), more work is needed to assess what is communicated by virtual acoustic design (understanding *what it does*). This chapter addresses virtual acoustic design from a perspective which seeks to understand and critique the influence of mediated sound cues on our conception of social reality.

Representation and Orientation

In order to understand the function of VALORANT's sonic discourses of difference, we must first understand how its varied audiences (players, audiences, game developers, scholars, etc.) approach the game and orient themselves to its representations of identity and culture. Sara Ahmed (2006) suggests that orientation can be understood as a condition by which we encounter the meaningful and coherent appearance of objects. Intersectional identity and positionality have a great influence over how we come to ascribe meaning to particular sounds within the cacophony of VALORANT's audio sandbox. For instance, as an Asian American critical-cultural scholar, I am particularly drawn to examine how different elements of VALORANT's virtual acoustic design represent Asiatic nations, cultures, and people(s).

It is important to understand that games are dynamic texts and that different meanings are produced based on how players interact with their affordances. In *Persuasive Games: The Expressive Power of Videogames*, Ian Bogost (2007) outlines how players interact with games' mechanics, code, narratives, and environments to produce a system of meaning which he calls "procedural rhetoric." Much of the existing literature in game studies concerning representation explores the relationship between players and their choice of avatar (see for example: Cheong & Gray, 2011; see also Martey & Consalvo, 2011; Taylor, 1999; Boellstorff, 2015). This chapter adopts an approach closer to Bogost's procedural rhetoric to identify how the virtual acoustic design of VALORANT's maps, avatars, and weapons interact to communicate notions of identity and difference through subtle audio cues.

To analyze how VALORANT's virtual acoustic design communicates notions of racial and cultural difference, I adopt a framework of representation as ideology at work. This attitude toward representation is informed by a rich history of scholarship that understands ideology as an act of orientation. For Edward Said (1983), a text's representation is always a product of the "worldliness" (p. 4) of both its author and interpreter. Similarly, for Stuart Hall (2017), representation is always inextricably tied to "the production of knowledge" and "the inscription of power on the body" (pp. 47-48); just as to Jacques Attali (1985), music does not passively represent culture, it actively "wants" for a certain negotiation of social relations (p. 20, emphasis added). On one hand, representation operates as a reflection of developers' attitudes and a fulfillment of audiences' preexisting desires. On the other, representation serves to create new ideations and reify extant ways of knowing the Other.

Vibrating this view of representation against Ahmed's notion of orientation enabled critics to approach virtual sound design as innately rhetorical and often strategic. Orientation is a

fundamental consideration in any sound design project. For example, if a trained acoustic technician were to design an audio system for a theatre, they would not simply place speakers randomly about the room. They would consider how the differently sized drivers of each speaker suits a particular range of vibrational frequencies, assess the demands of the space based on its unique architecture (Is the ceiling high or low? What material are the walls made of and how effectively will they reflect/absorb sounds? Will they need to isolate the acoustics to prevent noise bleed into the adjacent screening rooms?), and configure how their vibrations will resonate in relation to the outputs of other speakers in the system at different focal points in the room based on their placements. In many ways, the sophisticated virtual acoustic environments of videogames like VALORANT build on these existing techniques and practices of mediums like film, television, radio, live music, etc. Understanding how each sound is designed *to* orient players and *by* orientations of the game designers can uncover a great deal about the rhetoricity of the game's sound design.

Analysis

Racialized sound cues play a fundamental role in how players locate, orient, and immerse themselves within VALORANT's virtual world—from key tactical gameplay information, to their sense of place and space, to their location in time, and to a customized sense of their own individuality. My analysis of VALORANT's virtual acoustic design is offered in two sections. First, I discuss how sounds are used in map design to craft a particularized concept of location and locale. I examine how the virtual acoustics of two of the game's maps, Bind and Split, represent a dichotomous logic of temporal Orientalism that positions some portions of the Orient as inherently primitive and stuck in time while at the same time positioning other areas as hyper technological and overindustrialized. Second, I discuss how purchasable weapon skins utilize

racialized sound cues to orient players to a stylized sense of self. I highlight how an Ornamentalist approach to Asian identity enables Euro-American players to accessorize their gameplay and develop their sense of self through Asian culture.

Location and Locale: Listening for Temporal Orientalism in Map Design

VALORANT's virtual acoustics are designed to orient players not only in relation to enemies and allies in tactical gameplay, but also to their geographical place in the game's virtual world. Game studies scholars have explored how games produce an immersive sense of space and place, often by drawing on real-world locations as inspiration. VALORANT's sound design builds on rich histories of sound production in film, TV, music, ambient noise, foley studios, etc. in order to produce and embed a whole host of textural signals into its maps. It operates by translating an accumulation of these textural signals in the game's acoustic environments to produce a sense of location and locale which is uniquely geographical, cultural, and racialized in nature.

It is worth noting that this is a standard industrial practice in which VALORANT is not alone. Nearly every AAA game utilizes sound design to constitute a sense of space and place, and some (e.g., Fortnite) have even begun to host large synchronous events such as live concerts within their virtual spaces. However, VALORANT's position as a massively popular, free game without an ostensible central storyline makes its representations particularly interesting. Since VALORANT lacks many of the direct story-building elements of other games (cut scenes, single-player campaign, etc.), the subtle, passive narrative-building carries more influence in the production of meaning in its futuristic world. Perhaps the most striking examples can be found within VALORANT's assorted multiplayer maps, each with its own unique thematic and place in the world.

Each map in VALORANT contains aural textures and ambient noises which, through the intention of producing a particularized sense of space and place for players, smuggle with them assumptions about cultural difference. Control over the soundscapes of the metropolis, the desert, the coast, et cetera is a deeply important exercise of power for imperialist ways of thinking about, interfacing with, and knowing the Other (Arkette, 2004; Peake, 2012; Skelchy, 2021). Investigating how developers communicate to their audiences what Japan *sounds like* or what it is like to *hear* Morocco can teach scholars of sound, games, and media more broadly how to listen critically for what representations of race *sound like* or how to *hear* nationality in the artifacts of their study.

I divide the virtual acoustic design of each map into three taxonomies: (1) ambient noises, which are generally subtle noises intended to give the player a sense of place; (2) ground textures, which produce varied sound effects based on what material a character is walking on (sand, cobblestone, metal, etc.), which enemies can use to triangulate each other's positions on the map; and (3) object interactions, which include objects on the map which elicit unique sound cues when players shoot, stab, or otherwise interact with them. Accordingly, I argue that temporal orientalism is communicated through the virtual acoustic design of VALORANT's maps through an assemblage of ambient and interactive sound cues.

If we consider the map Bind, for example, players are keyed into their location in a dystopic Rabat, Morocco, through a number of subtle virtual acoustic design choices. In terms of ambient sounds, players are gently eased through the loading screen and into the world of Bind by songbirds tweeting and stiff gusts of wind. It is worth noting that these sound effects are actively obstructive to VALORANT's gameplay, since too much ambient noise could easily overwhelm the subtle audio cues players rely on for tactical information. As a result, the rustle of

wind and wildlife are localized by developers to the Attacker and Defender spawn points. These sound effects may not have a function in terms of game objectives, but they are still included in localized positions in order to set the scene in Rabat through dynamic natural sonic textures.

Listening to ground textures and object interactions can uncover a great deal about how developers position Rabat's place in the world, especially since the vast majority of VALORANT's player base have not been to, and likely will never visit, Morocco in their lives. By far, the most common ground textures on Bind are sand and stone, even in areas of the map that are predominantly indoors, accompanied by some areas with sheet metal, mechanical metal doors, and even fewer with wood. The object interactions unique to Bind include plumes of various bags of spices that erupt upon interaction, and the soft give of cacti and desert flora, which are not found on any other map in the game. What little technology is present on the map, such as the doors to the experimental teleporters unique to Bind, is represented with crude and clunky mechanical noises.

It is worth noting that most players probably do not think of Bind as set in Morocco, much less Rabat specifically. While the coordinates of each map are available during the loading screen into VALORANT matches, it is unlikely that the majority of players take their time to decipher the precise location of each map. Instead, Bind stands in for a generalizable and vague Arabic desert town. What is signaled to players through the virtual acoustic design of Bind's virtual acoustic design, nonetheless, is a fiction of Rabat as desert-like, economically undeveloped, and fundamentally primitive—placing it in line with a broader Euro-American racial imaginary of Middle Eastern and North African (MENA) nations and peoples.

By listening to VALORANT and other games, we may then begin to understand how social relations unfold not only within a space or place, but also in particularized resonances,

tempos, and rhythms. The racialized imaginary of MENA nations and cultures as undeveloped and stuck in time can be juxtaposed starkly alongside depictions of East Asia within the contemporary logics of temporal Orientalism as hyper-technological and over-developed. The term techno-Orientalism has been used extensively to describe the ways in which Western media productions often fixate on Asian technological influence to configure a dystopian imaginary of the future as threatening, lifeless, void of emotion, and fundamentally yellow (Morley & Robins, 1992, 1995; c.f. Ma, 2007, 2017, 2020; Roh et al., 2015).

Over the last decade, scholars have noted how techno-Orientalism manifests in videogames in unique forms. Mia Consalvo (2016) notes how neo-techno-Orientalism is communicated not only through language and cultural references, but also in gameplay, geography, genre, and platform (Consalvo, 2016). Understanding how each element of games communicate the relationality of time, space, place, race, and nationality allows us to better understand how the holistic notion of difference is influenced by game design. Listening to how sound design orient players within space and time invites scholars to uncover the acoustic functions of power and relationality.

The virtual acoustic design of the map Split exemplifies how techno-Orientalist fantasies are communicated through the sonic imaginary of a futuristic Tokyo, Japan. The ambient soundscape of Split is characterized by the bustle of urban life. The constant hum of air conditioning units, the mechanical churn of large construction equipment, and the busy noises of a metropolitan train station envelop Split's ambient acoustic design. The songs of Rabat's birds are replaced in Tokyo by the noises of automobiles—abruptly breaking, their engines revving, and their horns blaring.

The interactive textures of Split's acoustic design tell a similar story, albeit through different means. The ground textures in outdoor areas on Split are constituted almost entirely by the sounds of concrete and asphalt. Notably, there is a significantly more pronounced differentiation between exterior and interior ground textures in VALORANT's version of Tokyo than there are in Rabat. The interior ground textures of Split are almost entirely wood with bits of metal, save for a garage area with concrete. Split's only unique object interaction is the sounds of shattering glass projection screens when players shoot or stab train station maps on Site B. In all, Split tells a very different version of a dystopian future than Bind does. Where Bind is rendered stuck to an undeveloped past, Split's virtual acoustic design tells the story of an almost overdeveloped future.

Regardless of whether the acoustic design of VALORANT's gameplay is intentionally tailored around these understandings of representation and relationality, it nonetheless functions as a powerful rhetorical tool for conveying a hegemonic Euro-American conception of difference and attuning (or *orienting*) audiences to the logics of temporal Orientalism. Seeking to answer Herman Gray's (2017) call for contemporary media scholars to "track down and connect... the social basis of knowledge and truth of race" (p. 164), we can identify how audio serves a key role in formulating contemporary understandings of what race *is* and extend our understanding of how sound cues function to secure a social order of white U.S. American dominance. In other words, what is at stake in defining how VALORANT's acoustic design communicates difference is the otherwise ineffable constitution of the racialized imaginary.

Accessorizing with Audio: Weapon Skins and Ornamentalism

Racialized sound cues also play a fundamental role in how players orient to their own sense of identity. One of the most significant ways this occurs in VALORANT is through

weapon "skins," which are cosmetic upgrades players may purchase in exchange for real-world money in order to accessorize their gameplay experience.

Especially in a free-to-play game like VALORANT, skins enable players to form a more individualized and customized player identity. Basic weapon skins simply upgrade the visual cosmetics of player's weapons while more advanced skin lines include multiple colorway variants as well as unique finisher animations and upgraded audio. Unlike some other first-person shooter games (e.g., Counter Strike: Global Offensive) where players trade skins for real-world currency through third party marketplaces, weapon skins in VALORANT are tied to a player's account and are non-transferrable.

Still, there is an entire economy built on players' desire to customize their experiences and accessorize their gameplay. Like other free-to-play games, VALORANT encourages microtransactions for cosmetic in-game purchases, which generate a huge amount of revenue for game developers. Reports indicate that a single skin set generated over \$18.7 million USD in revenue for Riot Games in 2022 (Robertson, 2022). Until now, there have been around 330 skins available for purchase in VALORANT. The average cost of a new pack of skins (typically including around 5 gun skins) is about 7100 VALORANT Points, which translates to roughly \$70 USD (Stubbs, 2020a). While some more affordable options exist, such as purchasing the Battle Pass each season for about \$10 USD to receive roughly 10 skins, these options come with fewer features. Namely, the Battle Pass skins lack audio elements, leaving accessorizing solely to the visual elements of the gun.

Sound plays a significant role in the perceived value and satisfaction of weapon skin purchases. Skin sets that come with unique audio effects are sold at a higher premium that those without and are not available to unlock via the Battle Pass. Game developers are keenly aware of

the role audio plays in the marketing of these cosmetic materials and lean into these considerations when planning for the design and release of new skin sets. For example, Riot Games worked in collaboration with Grammy-winning producer and electronic dance music artist Zedd in the production of the Spectrum skin line. In an interview about the Spectrum skin line, Art Lead on VALORANT, Sean Marino, said:

Something we established really early on...was that we wanted to make a skin that would be broadly appealing and awesome whether or not you were familiar with Zedd's music or brand. This means that players who like sci-fi and sound-heavy skins would love this skin, rather than this just being a skin that only Zedd fans would enjoy. ("Zedd Talks about His 'Spectrum' Skin Collaboration with Valorant," 2021)

Sounds enact an important function in the production of customizable gameplay experience and act as a key marketing point for game developers.

This process becomes especially saturated with meaning when racialized audio-visual cues are used to thematize skins. For example, the Oni skin set combines visual aesthetics of traditional Japanese Oni masks with a sonic palette characterized by ethereal and mystic embellishments. A writer for *Forbes* described the skin set as featuring "an oriental samurai theme, with the upgrades adding green mist reload and firing animations, and a samurai sword finishing effect" (Stubbs, 2020b). The ethereal sound effects of the Oni skin line serve a dual function. On one hand they add an aural smoothness to the transitions from switching between weapons, reloading, and firing, producing a stylized sonic aesthetic that is overall rounder and more fluid than the standard weapon sets. On the other hand, the hazy, whooshing, misty audio cues—combined with the reverberate metallic sound effects of the samurai sword finishing

effect—are designed to evoke the skin line's namesake of Japanese folklore: the *oni* (demon/devil).

In "Ornamentalism: A Feminist Theory for the Yellow Woman," published in Critical *Inquiry*, Anne Anlin Cheng (2018) moves beyond the typical conceptual frameworks for racial embodiment—such as those offered by Fanon's (1952) epidermalization and Spiller's (1987) "hieroglyphics of the flesh"—toward a theory "at the interface of ontology and objectness" (p. 432). She argues that Asiatic femininity is constructed in the Euro-American imaginary not as an immutable corporeal identity but rather above all as a decorative and portable style. Cheng revises the term "ornamentalism" as "traditionally used in aesthetic philosophy to refer to the deployment of ornament for decorative purposes, especially when done in excess" to an "almosthomophonic" extension of Said's Orientalism (p. 429). However, whereas the Saidean concept explains the transformation of racialized persons into objects (commodification), Cheng explicates the mutation of things into racialized personhood (ornamentalism). Ornamentalism, as deployed in this essay, refers to not just the commodification of Asian identity but to the specific technology of power enacted through the entanglement of personhood and thingness, which defines the convergence of the Asian and the decorative. Fundamentally, ornamentalism argues that the discourse of Asian identity is inexorably attached to larger considerations of life in the Euro-American imaginary: artificiality, beauty, and violence. Understanding the ways in which players customize their gameplay through purchases such as the Oni skin set as a practice of ornamentalism uncovers the fascinating and power-laden relationality between neoliberalist concepts of individuality, consumerism, and contemporary understandings of Asian identity at the nexus of virtual acoustics and accessorizing.

Examining weapon skins through the theory of ornamentalism supplies the analytical power to uncover how the seemingly innocuous process of gamers paying to unlock aesthetic bonus content is in fact a rather deeply meaningful rhetorical practice. Specifically, understanding the way in which accessorizing with virtual audio cues functions through the lens of ornamentalism exposes sound's active role in constructing contemporary racialized imaginaries of Asian identity as reducible to a portable aesthetic. While Cheng's theory of ornamentalism originates as a theory of visual aesthetics, it raises important questions for the sphere of aural criticism and theory: In what ways is Asian identity "ornamented" through sound? Where does objectness end and personhood begin within a sonic frame? How do sounds' materiality (or "thingness") become entangled in the constructions of racialized personhood? How does the *im*materiality of virtual acoustics complicate our understanding of ornamentalism's origins?

In another example, the Glitchpop skin set combines digital and pop art visual aesthetics with a synthetic, futuristic techno sound design. One notable aspect of the visual design of the Glitchpop skins are the stickers and holographic advertisements for fictional companies which adorn the guns. Several of these advertisements are overtly Asian. For example, one advertisement for the brand 'NSSSDLE' depicts an ostensibly Asian girl with her hair tied in "space buns," slurping noodles from a bowl. Another depicts an angry octopus sporting a hachimaki (Japanese chef's headband) in front of, again, more noodles. VALORANT's Senior Weapons Artist Chris Stone and Senior Concept Artist Sean Bingham (2020) note that their team "pulled inspiration" from the aesthetics of 1990's anime such as "Akira, Ghost in the Shell, [and] Cowboy Bebop" during the process of designing the Glitchpop set. The Riot Game employees go on to explain that they sought to invoke the longstanding cyberpunk thematic of a "futuristic

Corporatocracy" with the advertisements. "We knew that we wanted to deepen the fantasy by thinking about how the weapon would be *personalized* with stickers and holographic elements that reference 'real' brands in a cyberpunk alternative universe," they write (emphasis added).

Since its earliest conceptions, techno-Orientalism has been critical of cyberpunk fiction's visual aesthetics (Morely and Robins, 1992, 1995). What has been less attended to are the ways in which techno-Orientalist discourses are conveyed through a rather limited set of sounds. The sound effects for the Glitchpop skin set are a representative example of what techno-Orientalism sounds like: characterized by scratchy, zippy audio sweeps and distorted techno. A phaser effect is used to produce a sci-fi, "techy" ethos to the Glitchpop set's sound design. Phaser effects which are a standard plug-in for any contemporary digital audio workstation (DAW) software work by splitting an audio signal into two then utilizing high and low pass frequency filters to create a series of exaggerated peaks and troughs in the frequency spectrum of one of the signals before combining it back with the original (Smith, 2010). The resulting effect is often associated with other-worldly electronic effects. For example, C-3PO's dialogue in *Star Wars* was famously processed using this sound-editing technique to imbue his character's voice with a more robotic quality (Glitch, 2019). That the supposed hyper-technological future of Asian cultures is communicated through sound design serves to make the logic of techno-Orientalism more immersive and lucid.

Further, understanding the Glitchpop skins' acoustic design as not only a permutation of techno-Orientalism but as an extension of techno-Ornamentalism uncovers several key findings. First, it provides further evidence that Asian identity can be understood in the Euro-American imaginary as invokable not only through a set of portable visual styles and icons but also a fluid set of auditory *ornaments*. Second, these audio ornaments are traceable through industrial

practices and norms, built into the affordances of DAWs and the very fabric of contemporary editing and production tools. Third, the function of audio ornaments in making the techno-Orientalist fantasy more *sensible* and immediate invites us to question sound's role the use of Asian identity as a portable style in the creation of self-identity. Chris Goto-Jones (2015) refers to the blending of analogue- and techno-Orientalism in videogames such as Mortal Kombat as "Gamic Orientalism" that "folds back on itself" to demonstrate "how gamers who are not Asian may experience the kind of 'lust' for *being Asian* that is sometimes seen as a romantic consequence of Orientalism itself" (p. 45). The sounds of Glitchpop's cyberpunk future and Oni's samurai mysticism allow gamers to more fully embody, or at least immerse themselves, in the fantasy of *being Asian*.

Conclusion

VALORANT's acoustic world is unlike our real one in many ways. Its soundscape is filled with a mix of realistic tactical sounds of guns and flashbang grenades, fantastical noises of magic wind and ice powers, and a voice chat which silos players' dialogue off so that only their own team can hear their strategy talk and banter. What is more interesting, though, are the ways in which this chapter demonstrates that VALORANT's acoustic world is not apart from *ours*. What is communicated by the game's virtual acoustic design is a world full of diversity but in a form that reduces cultural differences to a rather limited set of stereotypical representations. These representations reflect, reify, and create our social reality—and only by listening closely can we understand the true extent of their influence.

VALORANT's map design utilizes ambient and interactive audio cues to locate players within a particular place and time. This chapter demonstrates that, in doing so, the game's virtual acoustic design also negotiates social knowledge of national, cultural, and racial identity. Though

its ethos of diversity makes VALORANT a particularly interesting case study, it is not alone in communicating about difference through the sonic design of its maps; virtually every AAA multiplayer game with customization affordances features this same use of Asian cultural artifacts as accessories (e.g., League of Legends, Fortnite, Halo: Infinite, etc.). Although this case study offers a rather limited scope of two maps and a few weapon skins, it nonetheless reveals a whole host of meanings wrapped into the virtual acoustics. The culture and economy surrounding VALORANT's weapon skins is a fascinating case study for how players orient themselves to their sense of individuality and style. Future scholarship could interrogate how virtual acoustic design in other games, or even new media more broadly, is used to influence the racialized imaginary in other contexts, by other means, and to different ends. Extending this work would be generate a more robust critical lexicon for analyzing the wide variety of cultural meanings communicated through virtual acoustic design.

Examining audio accessories through the lens of ornamentalism uncovers a host of possibilities for understanding contemporary Euro-American imaginaries of Asian identity as a portable aesthetic style. Accordingly, I believe it is worth noting that the term "skin" itself is evocative. According to Ahmed, the skin is always "inhabited by, and inhabiting," a broader cultural landscape (Ahmed & Stacey, 2001, p. ix). If we assess how we present ourselves and others critically, there is a potential to uncover something beautiful and in desperate need of our attention and care. That is to say that skin is always the skin *of* something bigger than what it covers: a community, a people, a culture. Tender, porous, exposed.

CHAPTER 3. CONTROLLING SOUNDS: SONIC STEREOTYPING DISCOURSES IN VALORANT

This chapter seeks to answer RQ2: How is character identity communicated through the sound design of VALORANT? This research question emphasizes the role of sound design in constructing identity in new media. It builds on a growing body of research dedicated to examining how sound is used to influence and reflect imaginaries of the Other. This chapter intervenes in nascent conversations on the convergence of race and sound by demonstrating how sounds are used to construct racialized archetypes I call controlling sounds. Inspired by the work of Patricia Hill Collins (1999) on "controlling images" within visual media, I utilize the term "controlling sounds" to describe how stereotyping discourses are injected into—and maintained within—the public imaginary through sound productions. Originally appearing in Collin's chapter "Mammies, Matriarchs, and Other Controlling Images" in her book Black Feminist Thought (1999), the figure of controlling images conceptualizes stereotyping discourses as a strategic rhetoric that marshals persuasive resources to maintain the Othering and oppression of minority groups. Similar to Collins, I address stereotypes not for the sake of debating the "realism" of certain representations but rather to examine the social, cultural, and political functions of those representations. Instead of debating whether or not a character is "authentic," we should instead focus on what narrative and social structures enable or constrain that character to do (Shohat & Stam, 2014). Controlling images (or sounds) "are designed," Collins argues, "to make racism, sexism, poverty, and other forms of social injustice appear to be natural, normal, and inevitable parts of everyday life" (p. 69).

In her book *The Sonic Color Line*, Jennifer Lynn Stoever (2016) formulates a keen understanding of "race's audible contour[s]" as an exigent social issue (p. 6). An influential

departure from the white cisheteropatriarchal norms that have characterized much of sound studies' rhetorical turn, Stoever outlines how dominant listening practices in U.S. American culture codify racialized imaginaries constructed through sound. I concern myself here with how transnational imaginaries of race and gender are created, maintained, distorted, and exported by U.S. American media companies. While I use the term *imaginaries* to evoke media theorists' longstanding claims that, in the contemporary hypermediacy of the global media economy, understandings of difference are necessarily grounded in the "imagination as a social practice" (Ang, 2001; Appadurai, 1990, p. 31; Attali, 1985), I also recognize the irony and limits of using theoretical terminology steeped in the visual root of the *image*. Stoever's work to trace the sonic color line through performances in the Antebellum period not only serves to historically locate the significance of sound in the construction of difference in popular U.S. American understanding, but it also uncovers the durable audio-visual linkages between the racial gaze and the listening ear. In this way, she demonstrates to us that imaginaries—or "mechanically produced images" in the sense of the Frankfurt School (Horkheimer, 1972)—are often soundtracked, and that these sound-tracks of everyday life are often imbued with a "distortion" caused by U.S. American, white supremacist ideologies that implicate serious political considerations of the emotional, psychological, social, and material wellbeing of people of color (Stoever, 2016, p. 76).

In this chapter, I exemplify how sounds are not merely part of the process by which we communicate otherness, but that they have the potential to fundamentally *control* how we perceive the Other. I will start by outlining a brief etymological history of the term "stereotype" before explaining how a vibrational reading of the term might be generative to scholarship which confronts the complexity of cultural representation in contemporary mediated culture. Then, I

will analyze the sound design of three avatars from VALORANT in order to demonstrate the ways in which stereotyping discourses are communicated through audio and paralinguistic cues.

Theorizing (Stereo)types Through Sound

The term "stereotype" is borrowed from the French adjective "stéréotype," which is derived from the Greek words stereos (meaning solid, firm) and typos (impression). The word was first used in the mid-to-late 1700's to describe a process in printing wherein metal plates were cast from molds of a printed page in order to both preserve text as well as recreate it more efficiently (Stewart, 1918). In English these plates were called "flongs" or "stereotype plates," whereas in French they came to be known by the jargon term "cliché" (Westwood, 2011). By 1850, the word was used to mean "image perpetuated without change" (Li, 2013). In the early 1920's, the word appeared in its most contemporary usage in Walter Lippmann's (1922) Public Opinion, described as "a form of perception" that, in seeing people as mere "types and generalities" "imposes a certain [preconceived] character" upon their being (pp. 98, 89). The term's roots in the earliest forms of mass media publication is no coincidence—and much has been revealed by critical-cultural scholars studying the relationships between the visual and the Other, the imaged and the imagined (Appadurai, 1990; Collins, 1999; Hall, 1996; Khrebtan-Hörhager & Avant-Mier, 2017; Vats & Nishime, 2013)—but more still can be gleaned from an alternate reading of its roots.

In assessing the functions of controlling sounds, I contend that we could benefit from dislodging the image as the central organizing metaphor for interrogating stereotypes, and instead turn towards the potential for understanding and theorizing representation through the metaphor of vibration. Especially as the physical and virtual worlds become more intwined in our everyday lives, we might begin to consider how oversimplified representation exists in

dimensional. Whereas vision is perspective-based, hearing inherently immerses its subject (Sterne, 2003). While our vision must travel to an object, sounds come to us—in the same way that we don't typically hunt for stereotypes as often as they *confront us* in our day to day. Hearing also inherently involves material contact with the outside world; whereas vision requires distance from it. Rather than understanding representations through the firm, repeated stamp of the printing press, our contemporary era of hypermediated sociality calls for a vibrational reading of stereotypes that conceptualizes representations through the dynamic and cacophonous ways in which we are actually confronted with cultural difference in everyday life. Analyzing certain aspects of sound (e.g., frequency, volume, loudness, pitch, velocity, tempo, rhythm) can give insight into *how* stereotyping discourses are communicated through audio while highlighting that the *stereo*- in stereotype emphasizes the immersive nature of sonic representations.

Controlling Sounds in VALORANT

Each of the 18 agents in VALORANT has unique abilities that players can trigger with the push of a corresponding keyboard input. Riot Games' sound design team records and edits distinctive audio for each champion's abilities. According to Riot Games, creating sound effects for its characters is "a constant balancing act between gameplay clarity and character thematic. There is no one-size-fits-all approach, and it can include everything from recording underwater explosions to smashing watermelons" (Brown, 2018). While the developers may use a wide range of unrelated objects to record game sounds and often put audio files through several layers of edits to achieve desired effects, it is clear that characterization is a central consideration to sound development at each stage of design.

In this section, I analyze how the sound design of three of the game's characters (Sage, Jett, and Sova) serve to communicate historically significant and reductive aspects of their national, racial, and gender identities. I reason that sound—as ephemeral, immersive, and embodied—is uniquely well suited as a metaphor for understanding stereotyping discourse, and that attentive listening practices can offer a critical resistance to controlling sounds' influence.

Sage: The Mysticized Sounds of East Asian Comfort Women

Named after the famously medicinal herb, Sage is designed thematically as the only dedicated healer in VALORANT's cast. Her description in the character select screen reads: "The stronghold of China, Sage creates safety for herself and her team wherever she goes. Able to revive fallen friends and stave off aggressive pushes, she provides a calm center to a hellish fight." Sage's kit is built around her ability to wield mystical ice and healing powers, accompanied respectively by a sonic palette that mixes flourishes of high, rich shimmering and bursts of low, gusting whooshes. Sage's character fulfills one of the most persistent, durable, and evolving of Western stereotypes that imagines Asian women as innately spiritual, passive, and subservient.

Sheng-Mei Ma (2020) recently catalogued a series of understudied yet historic representations and stereotyping discourses of Asianness in popular media. Ma explains how "Oriental laundrymen" have historically been used as emasculating caricatures of Chinese immigrant laborers—both to bolster xenophobic attitudes towards Chinese laborers as well as to foment the notion that they cannot effectively satisfy Chinese women (p. 135). Similar stereotyping discourses gave rise to the phrase "open sesame" from *Sherlock Holmes*, which indicates Western men's perceived agency over the Orient and its passive peoples. These same stereotyping discourses are remediated in the holistic design of Sage's character, whose abilities

are uniquely more about serving her team's needs than any other character in the game, aligning her with the stereotype of the East Asian comfort woman.

The same stereotyping discourse is also reflected quite clearly in the developers' sound design choices for Sage. The gleaming noises' high pitches and scintillate articulations are used to indicate a delicate femininity within Sage's sonorous characterization. The shimmering sound effects that accompany several of Sage's abilities likely result from the use of chorus effects, which layer several individual sounds that are close in pitch and of approximately the same velocity, achieving the perception of a single, glistening noise. While such gleaming audio may feel out of place in the "character thematic" of a brazen and tactical American special operations soldier (viz., Brimstone), here they are used to compliment the fragile and sparkling charm of the East Asian comfort woman.

Sage's ascribed racial identity is also rendered legible in the sound design of VALORANT in terms of velocity. In order to achieve "game clarity," sound designers ensure that Sage's whooshing noises are articulated in brief, granular bursts. The quick whooshing audio that accompanies the rest of Sage's abilities encourages players to perceive her innate spirituality and fleeting, mystical allure. Such an emphasis on spirituality is not merely a sonic reference to Sage's resemblance to comfort women, rather it can be attributed to a larger media trend toward depicting an innate mysticism of Asiatic characters and cultures. For example, Sage's voice lines consist largely of vague, mystic platitudes. Paired with the succinctness of her lines, this type of idiosyncratic speech pattern is the calling card of what Jane Naomi Iwamura (2011) terms "the Oriental monk" figure. From Yoda speaking in disjointed, backwards sentences in *Star Wars* to Mr. Miyagi speaking in obtuse metaphors in *The Karate Kid* films, the Oriental monk is not simply a bald, devout Buddhist but a Hollywood trope that trivializes Asian

characters as containing an innate mystic wisdom. The problem with these representations is not simply the question of their (in)accuracy but their function. These tropes "colonize the real" by enveloping audiences' imaginaries in repeated and uncritical associations of Asiatic personhood with intrinsic spirituality (p. 112).

More importantly, these tropes are constructed and invoked deliberately through sound design. Sage's sonic characterization fundamentally fulfills Western audiences' desires for East Asian women to act as "comfort women," both in terms of her mystical healing powers and in terms of latent sexual desire. Although less overtly sexualized than the women in other Riot Games productions, Sage is still the target of sonic sexualization. This sexualization reaches its peak with the unique sound effects assigned to her death. During gameplay, she gives off exaggerated moans of relief upon death. Sounds like these build on a particularly pernicious history of fetishist violence against Asian women (Khrebtan-Hörhager & Kim, 2020; Nadesan & Kim, 2021; Pak, 2016). As Collins (1999) posits that the "image of Asian women in pornography is almost consistently one of being tortured," it is also the sounds of Asian women's fantastical enjoyment of such torture which engenders a sadistic, fetishistic pleasure for audiences (p. 148). Corbett and Kapsalis argue that "evidence of female sexual pleasure is usually deferred to the aural sphere" and that "the listener (presumed and structured male) may surreptitiously, perversely identify with the woman-as-victim" (as cited in Frischherz, 2018, p. 276). That is to say, it is not enough for Sage's death to evoke pleasure for the player (who is also, in this case, the listener), she must also herself express pleasure in order to fulfill the fantasies of the patriarchal listening ear. Sage is characterized and controlled by the sounds of a passive, mystical, servant: high, rich shimmers signal her femininity; while low, staccato gusts indicate

her ascribed Asianness; and exaggerated, masochistic erotic noises suggest her idealized passivity.

It is crucial to recognize that the consequences of representations like these are far from trivial. They are used to inform, motivate, and justify real world violence against Asian women. For example, in March of 2021, eight people—six of whom were Asian women—were murdered in a series of shootings at spas near Atlanta, Georgia. While news outlets report that the complete motives for these attacks have yet to be deduced, we do know that the white gunman responsible "told the police that he had a 'sexual addiction' and had carried out the shootings at the massage parlors to eliminate his 'temptation'" (Fausset et al., 2021). In the rush to report on these grievous events news media was quick to dismiss the potential that these murders were racially motivated, distinguishing the possibility of a "hate crime" as mutually exclusive to the shooter's "sex addiction" (Sullivan, 2021). But as Sage demonstrates to us: the fetishization of a passive and subservient Asiatic femininity, the media representations that proliferate and profit off of that fetishization, and the violence waged against Asian women are all intimately linked.

Jett: The Quiet Threat of the Mystical Ninja

Of the stereotyping discourses that routinely shape the Western imaginary of Asian womanhood, the most enduring include two viscerally contrasting figures. Some representations reduce Asian femininity to the role of a fetishized passive servant like Sage. However, when Asian women fail to fit neatly into the idealized role of passivity in the dominant Euro-American imaginary, the equally xenophobic trope of the hostile, furious "dragon lady" is used to contain Asian women (Shah, 1997). As exemplified by Sage and Jett, so many stereotypes run in contrast and often blatant contradiction to one another, characterizing Asian women, on the one hand, as passive and subservient and, on the other, as an active threat. The coexistence of such conflicting

discourses is possible because, as Collins (1999) among others (Bhabha, 1994; Said, 1979) argue, stereotypes are fundamentally *functional*. In other words, the way in which stereotyping discourses manifest is always fluid because their purpose is contingent upon the needs of the dominant class within any given context.

Using sound as a primary metaphor supplies critics of stereotyping discourse with analytical power because sound, too, is innately ephemeral. Whereas one can render even a dynamic visual medium like video static and suspend it for examination frame by frame, a recorded sound can only be silenced (paused) or elongated (sustained). The fleeting nature of vibration is akin in many ways to contemporary stereotyping discourses, many of which we *feel* but cannot quite nail down because they are constantly running in opposite directions simultaneously. Understanding representation as ephemeral encourages us to understand stereotypes as inherently contextual and fluid as well as to approach the task of critique as less of a practice and more as a critical *sensibility*.

Jett is a massively popular ninja assassin character. She boasts the highest play rate out of any VALORANT character by far (blitz.gg). The gameplay is designed to allow her to capitalize on stealth and speed, to produce bursts of massive threat. "Representing her home country of South Korea, Jett's agile and evasive fighting style lets her take risks no one else can. She runs circles around every skirmish, cutting enemies before they even know what hit them," reads the game's official description for her character.

Jett's audio is characterized by a conciseness which, similar to Sage's articulate gusts, is used to construct a mysticized aesthetic around her character. Distinctly, however, Jett's sound effects are even shorter, faster, and more rapid in succession. Her signature ability, Cloud Burst, features a plume of smoke deployed for stealth during combat and is accompanied by a rapidly

trailing ambient *whoosh*. Her ultimate ability, Blade Storm, is characterized by quick slicing, twirling, and puncturing noises. Jett's quick-witted and snappy-voiced lines are bombastic and cocky—indicating her confidence in being a threat to the enemy team—are representative of how her sonic production creates in-game characterization through brevity. These distinctions indicate the range of velocity, tempo, and pitch that distinguish Asiatic femininity as passive, sexual object or active, engaged threat. That is to say, Jett's speed renders her more of a threat than a fetish object. Tempo is used to secure Jett's position as active and velocity solidifies her as hazardous.

Jett also speaks with a distinctly different accent than Sage. Whereas Sage's voice lines are spoken in a Chinese accent, Jett speaks with a standard Anglo-American accent. One could simply attribute this difference to the need to distinguish the two characters thematically within the VALORANT roster. Nonetheless, these accents function as paralinguistic cues of the sonic stereotyping discourses that control Jett and Sage. Scholars at the intersection of media studies and linguistics have argued that within "Hollywood productions, linguistic performances distinguish major characters from nonmajor ones: the former are consistently portrayed as speakers of English with a standard Anglo-American accent, while the latter speak with any number of nonstandard accents" (Hiramoto & Pua, 2019, p. 544). While Jett and Sage are not distinguishable as major and nonmajor characters in the traditional sense of film studies, Sage's accent certainly marks her construction as a support character whereas Jett's accent indicates an independence and agency that render her a threat in the sonic imaginary.

Jett can be understood as a paradigm case of the controlling sounds of a threatening, mysterious adversary. The concision, speed, and deftness that make up her sonic characterization each function to otherize her (and East Asian people more broadly) as not only Other but, more

specifically, as fundamentally menacing. Understanding the controlling sounds of the mystic ninja allows us to consider how the sonorous functions as a vehicle for both creating and conveying Orientalist stereotyping discourses that seek to posture Asiatic people and states as mysterious, irrational, and threatening. Jett's auditory characterization does not simply indicate elements of her playstyle to audiences, she also represents and reifies a broader imaginary of what Asianness represents.

Sova: The Hostile Technologies of Russian Intelligence

Cleverly named after both the Russian word for "owl" as well as the CIA's Office of Soviet Analysis (Johnson, 1996), Sova is VALORANT's foremost intelligence agent. His character description reads as follows: "Born from the eternal winter of Russia's tundra, Sova tracks, finds, and eliminates enemies with ruthless efficiency and precision." Sova's gameplay relies on uncovering information about the other team's whereabouts from a distance, utilizing an arsenal of highly advanced equipment that includes a futuristic bow equipped with several high-tech arrow options for reconnaissance and area-of-effect damage as well as an "Owl Drone" that can scout ahead and tag enemy positions. While VALORANT's East Asian women are constructed as Other through the sounds of mysticism, a contrasting hyper-technological focus is used to control Sova.

VALORANT's sound design functions to construct Sova's tactical intelligence threat as deeply intwined with his national identity as a Russian, remixing nostalgic Cold War era constructions of a Soviet Union threat and further blending them into the popular imaginary of Russia's present and future. The focal point of Sova's sound design is a series of science fiction technological sounds. The sound palette for Sova's abilities include the whirring of a tactical drone, the synthetic charge of his Recon Bolt, and the electric sounds of his Shock Dart and

Hunter's Fury. Whereas other characters in the game (e.g., the American characters Brimstone and Viper) utilize tactical equipment to get an edge on their competition, Sova's threat comes not from his weapons but from his ability to acquire and distribute knowledge.

On average, Americans still identify Russia amongst their top adversaries, and even enemies, on the global stage (Rapoza, 2017). This stigma stems in part from lasting anxieties, propped up by Hollywood drama, about the potential threat of durable Soviet intelligence networks (Khrebtan-Hörhager & Avant-Mier, 2017). In the article, "Perception of Intelligibility and Qualities of Non-Native Accented Speakers," researchers found that Russian male English speakers tend to be perceived as amongst the most intelligent, intelligible, and resourceful non-native speakers (Fuse et al., 2018). Western countries are increasingly insecure about their cybersecurity capabilities when compared to their Russian counterparts (Sabbagh, 2021).

Conclusion

The analysis of this chapter emphasizes how stereotyping discourses often thrive off forming not only reductive but also divergent and contradictory narratives of difference. Sage's sonic character illustrates the dangers entailed in a passive subservient representation of East Asian women, while Jett illuminates how the promise of independent and determined Asian womanhood is marshalled by stereotyping discourses that operate to "contain" threats to the hegemonic social order. Further still, Sova highlights the necessity for rejecting simplistic representations of the Other and instead calling for more holistically resonant representations of cultural diversity.

Accordingly, this chapter demonstrates the importance of understanding how controlling sounds emerge and what functions they serve in influencing our conceptions of cultural difference. By adopting a vibrational reading of *stereo*type, this chapter encourages a shift in

scholarly emphasis toward the fluid and immersive nature of representation in mediated sound design. Further work might utilize the figure of controlling sounds to analyze how any number of elements of sound design (music and score, architectural acoustics, etc.) are used to invent or attune audiences to stereotyping discourses.

CONCLUSION

As sound studies interfaces more prominently with communication studies, the majority of research concerns rhetorical implications of vocality and sound's potential for argumentation and advocacy. This thesis contributes towards a growing body of research that identifies sound's influence in shaping our understandings of intersectional identity by exemplifying how analyzing mediated sound design can uncover latent discourses of cultural difference. Further, this thesis explores how combining communication studies, game studies, and sound studies might begin to provide a lexicon for discussing otherwise ineffable forms of representation in immersive and interactive media.

In this conclusion chapter, I assess how the individual chapters work in concert to answer the RQ's provided in the introduction of this thesis. As mentioned, RQ1 questions "How is player identity constructed in VALORANT through its voice communication affordances?" while RQ2 interrogates "How is intersectional identity communicated through VALORANT's sound design?" In pursuing these questions, I consider what that means for VALORANT players and audiences, scholars of games and sound, and the field of communication. This conclusion also offers the opportunity to assess the strengths and limitations of my multimethod approach, to reground the overarching project in listening *to* and listening *for*, as well as to propose future directions for research.

Implications for Players and Audiences of VALORANT

This research is useful to VALORANT's player base and the widespread audience it commands insofar as it calls to the forefront the discourses of cultural difference that undergird the game's virtual acoustic design and sound affordances. While this thesis primarily engages

with VALORANT from the perspective of a relatively niche scholarly research interest, it is still important to return findings to the game's community as part of engaged scholarship.

All of VALORANT's player base can benefit from this thesis' response to RQ1. It is my hope that Chapter 1, in particular, encourages VALORANT's players to think reflexively about how they and their fellow players are constructed by the game's voice chat affordances. Chapter 1's findings help highlight the nuanced reasons that teammates may refuse to speak up and encourage the prioritization of more invitational rhetoric to foster comradery amongst VALORANT's player base. Further, I am eager to see how the findings from Chapter 3 may validate and reflect the lived experiences of other players who embody non-dominant intersectional identities and are still (like me) sorting out what that means in online spaces like this one.

The ways this thesis addresses RQ2 could also be useful to VALORANT's diverse audience. Players are increasingly critical and thoughtful of the ways in which difference is represented by games and within the gaming community, and I anticipate many will appreciate how this thesis invites them to expand their thinking about how games represent cultural difference through intentional sound design choices. Together, Chapters 2 and 3 provide a framework for assessing how VALORANT's virtual acoustic design influences our understandings of intersectional identity. They also establish a critical vocabulary for discussing how cultural discourses become embedded in the sound design of games more broadly.

Understanding that scholars of media, cultural studies, and communication overlap with gaming audiences, I am also optimistic that this thesis will inspire further work around sound design's potential for communicating discourses of cultural difference. More work in this area could approach all sorts of gaming genres and from a whole host of different positionalities.

Further work in this area could help to build a more fully realized critical framework for assessing how mediated sound design influences notions of intersectional identity.

Implications for Game Developers and Sound Designers

This project highlights the need for a comprehensive overhaul of sound design ethics. Outside of limited applications for journalism, sound editing is a technical form which generally lacks any widespread substantive maxims for guiding ethical completion of work. In recent years, ethics have become a pronounced element of formal education for visual media editing platforms. For example, courses which teach students how to utilize photo editing platforms like Photoshop frequently involve conversations and intentional curriculum design about the ethics of the program's influence on beauty standards, representations of racial difference, and so on. Perhaps by borrowing lessons from visual media, sound design could begin to more centrally incorporate ethics into curriculum for technical education. Especially in the context of games and other entertainment media, this project demonstrates how necessary it has become that we think more thoroughly about how sound design conveys representations of difference. Similarly, this project calls upon game developers to think critically about the distinctions and overlaps between concepts such as "thematic clarity" and reductive, oversimplified representations of cultural difference.

Implications for Scholars of Games and Sound

For game studies scholars, this work encourages a dedicated practice of listening *to* and *for* discourse of cultural difference in games. Sound is an often-underserved element of games in critical scholarship; yet, in responding to RQ2, this thesis demonstrates how much meaning is embedded in the subtle details of developer's sound design choices. This thesis contributes to game studies scholarship by excavating the potential of virtual acoustics to represent cultural

difference. Specifically, Chapters 2 and 3 demonstrate how virtual acoustic design is used to immerse players and characters within a particular diegetic context (space, place, time) in digital environments. Further, Chapter 2 brings into focus the politics and economics of representation entailed in cosmetic accessorizing in online gaming. This thesis only begins to break into the range of possibilities for game studies in uncovering sound's role in the production of immersive conceptions of culture. More work by game studies scholars could address how virtual acoustic design operates to mold our understandings of difference in other contexts.

For scholars of sound, this thesis exemplifies the importance of developing critical tools for analyzing how audio cues are used in mediated sound design to communicate notions of intersectional identity. As a rapidly growing interdisciplinary field, sound studies scholars could contribute a great deal of knowledge towards the different ways representations are codified in industrial practices. A clear example of how this thesis contributes to these efforts is through the analysis of Chapter 2 that highlights how phaser effects, a staple in industry staple digital audio workspace (DAW) programs, are used to invoke a sci-fi ethos that ultimately expresses as techno-Orientalism. Further work could, for example, examine how the design of industrial tools like DAW programs simplify representation for the sake of efficient content production.

Moreover, there are a number of useful theoretical tools and figures constructed in this thesis which could be applied in other contexts to assess a whole host of different media objects. Chapter 2 only scratches the surface of what rhetoricity is entailed in the rich interdisciplinary field of virtual acoustic design. Chapter 3's concept of controlling sounds could be applied to a seemingly endless list of sonic stereotypes, and further work could creatively imagine other ways in which the metaphor of vibration effectively services our thinking on stereotyping discourses. Much like this thesis, this further work would also be oriented by the researchers' own

positionalities—inviting the wonderous complexity and situatedness of critical cultural studies and sound rhetoric to continue to combine in new configurations to produce meaningful knowledge.

Implications for the Field of Communication Studies

As outlined throughout this thesis, when communication studies turns its attention toward mediated sound design it is especially well-oriented to understand and critique the influence of virtual acoustic design on our conception of social reality. This study emphasizes the possibilities for rhetorical scholarship to critically assess forms of representation that are otherwise quite difficult to put words to. Further work at the intersection of sound studies and communication studies will continue to produce valuable knowledge as we attempt to make sense of our raucous hypermediated world.

At several points, this thesis exemplifies the potential of adopting vibration as a central organizing metaphor for communication theory. An acoustic approach to orientation in Chapter 2 conceptualizes sound design as innately rhetorical, and often strategic. A vibrational reading of *stereo*type in Chapter 3 emphasizes the ephemeral, dynamic, and immersive nature of representation. A resonant approach to access and advocacy in Chapter 1 uses the metaphor of apprehending vibration to highlight the importance of *feeling heard* in relation to representation, safety, and community.

What this study has made abundantly clear is that sound will not soon cease to carry great influence in constituting our understanding of identity and difference, nor will silence shield us from being constructed by sound ourselves. In particular, Chapter 1 highlights the double-edged promise of silence: our own silence may offer temporary reprieve from engaging in micropolitical action here and there, but it will do nothing to protect us or our communities in the

long-run. All that is left to do is listen, where and when we can, and to speak up in response as long as our voices will hold out.

REFERENCES

- Ahmed, S., & Stacey, J. (2001). Thinking Through the Skin. Routledge.
- Ahmed, Sara. (2006). *Queer phenomenology: Orientations, objects, others*. Duke University Press.
- Allen, B. J., Zhao, Q., & Moreno, M. A. (2021). Digital Media Use Differs Between Transgender and Cisgender Youth. *Pediatrics*, 147(3_MeetingAbstract), 214–215.
 https://doi.org/10.1542/peds.147.3MA3.214
- Ang, I. (2001). On Not Speaking Chinese: Living Between Asia and the West (1st ed.).

 Routledge.
- Appadurai, A. (1990). Disjuncture and Difference in the Global Cultural Economy. *Theory*, *Culture & Society*, 7(2–3), 295–310. https://doi.org/10.1177/026327690007002017
- Arkette, S. (2004). Sounds Like City. *Theory, Culture & Society*, 21(1), 159–168. https://doi.org/10.1177/0263276404040486
- Attali, J. (1985). *Noise: The political economy of music*. Minneapolis: University of Minnesota Press.
- Baker, M. L. (N.D.). Valorant: Deaf Accessibility Case Study. https://leahybaker.com/valorant_access/
- Barthes, R. (2009). *The Grain of the Voice: Interviews 1962-1980* (L. Coverdale, Trans.). Northwestern University Press.
- Begault, D. R. (1998). Virtual acoustics, aeronautics, and communications. *Journal of the Audio Engineering Society*, 46(6), 520–530.

- Berktay, H. O., & Smith, B. V. (1965). End-fire array of virtual acoustic sources produced by the interaction of cylindrically spreading acoustic waves. *Electronics Letters*, *1*(7), 202. https://doi.org/10.1049/el:19650185
- Bevan, R. (2022, March 25). Valorant Called Out By Disabled Players For Purposely Not Allowing Touchpads. *The Gamer*. https://www.thegamer.com/valorant-accessibility-riot-games-touchpad-controller/
- Bhabha, H. K. (1994). The Location of Culture. Routledge.
- Boellstorff, T. (2015). Coming of age in second life: An anthropologist explores the virtually human. (REV-Revised). Princeton University Press.
- Brown, N. (2018). The Stories Behind League's SFX. *Nexus Riot Games*. https://nexus.leagueoflegends.com/en-us/2018/07/the-stories-behind-leagues-sfx/
- Carbaugh, D. (2007). Ethnography of Communication. *International Encyclopedia of Communication*. http://works.bepress.com/donal_carbaugh/12/
- Cesaro, S. (2018). Sounding Composition: Multimodal Pedagogies for Embodied Listening.

 University of Pittsburgh Press.
- Cheng, A. A. (2018). Ornamentalism: A Feminist Theory for the Yellow Woman. *Critical Inquiry*, 44(3), 415–446. https://doi.org/10.1086/696921
- Cheong, P. H., & Gray, K. (2011). Mediated Intercultural Dialectics: Identity Perceptions and Performances in Virtual Worlds. *Journal of International and Intercultural Communication*, *4*(4), 265–271. https://doi.org/10.1080/17513057.2011.598047
- Chess, S. (2017). Ready Player Two: Women Gamers and Designed Identity. University of Minnesota Press.

- Chuang, A. K. (2020). A Local Gay Man/Tongzhi or A Transnational Queer/Qu-er/Kuer:
 Reorganizing My Queerness and Asianness through Personal Reflection. In S. Eguchi, B.
 M. Calafell, & S. Abdi (Eds.), *De-Whitening Intersectionality: Race, Intercultural Communication, and Politics* (pp. 101–118). Lexington Books.
- Collins, P. H. (1999). Black Feminist Thought: Knowledge, Consciousness and the Politics of Empowerment (2nd ed.). Routledge.
- Consalvo, M. (2016). Atari to Zelda: Japan's Videogames in Global Contexts. MIT Press.
- Cooke, H., & Stavropoulos, A. (2021, June 2). How Many Players Does VALORANT Have?

 Dot Esports. https://dotesports.com/valorant/news/how-many-players-does-valorant-have
- Edgar, A. N. (2019). *Culturally speaking: The rhetoric of voice and identity in a mediated culture.* The Ohio State University Press.
- Eguchi, S. (2015). Queer Intercultural Relationality: An Autoethnography of Asian–Black (Dis)Connections in White Gay America. *Journal of International and Intercultural Communication*, 8(1), 27–43. https://doi.org/10.1080/17513057.2015.991077
- Eidsheim, N. S. (2019). *The Race of Sound: Listening, Timbre, and Vocality in African American Music*. Duke University Press.
- Ellis, C., Adams, T. E., & Bochner, A. P. (2010). Autoethnography: An Overview. Forum

 Qualitative Sozialforschung / Forum: Qualitative Social Research, 12(1).

 https://doi.org/10.17169/fqs-12.1.1589
- Fausset, R., Bogel-Burroughs, N., & Fazio, M. (2021, March 18). *The New York Times*. https://www.nytimes.com/live/2021/03/17/us/shooting-atlanta-acworth?auth=logingoogle

- Feinberg, L. (1996). Transgender warriors: Making history from Joan of Arc to Dennis Rodman.

 Beacon Press.
- Florian, P., Gottfried, B., & Janina, F. (2020). SCaLAr A surrounding spherical cap loudspeaker array for flexible generation and evaluation of virtual acoustic environments. *Acta Acustica*, 4(5), 19. https://doi.org/10.1051/aacus/2020014
- Forget, S., Totaro, N., Guyader, J. L., & Schaeffer, M. (2016). Source fields reconstruction with 3D mapping by means of the virtual acoustic volume concept. *Journal of Sound and Vibration*, *381*, 48–64. https://doi.org/10.1016/j.jsv.2016.06.019
- Frischherz, M. (2018). Listening to orgasm: Hearing pleasure sounds in the normative noise.

 *Argumentation and Advocacy, 54(4), 270–286.

 https://doi.org/10.1080/10511431.2018.1509597
- Fuse, A., Navichkova, Y., & Alloggio, K. (2018). Perception of intelligibility and qualities of non-native accented speakers. *Journal of Communication Disorders*, 71, 37–51. https://doi.org/10.1016/j.jcomdis.2017.12.006
- Glitch, D. (2019, August 9). Let's Talk about Phasers, Flangers and Formant Filter Effects.

 Inside Dance Music. https://idmmag.com/tech/tutorials/phasers-flangers-formant-filter-effects/
- Goto-Jones, C. (2015). Playing with Being in Digital Asia: Gamic Orientalism and the Virtual Dōjō. *Asiascape: Digital Asia*, 2(1–2), 20–56. https://doi.org/10.1163/22142312-12340019
- Gray, H. (2017). Race. In J. Gray & L. Ouellette (Eds.), *Keywords for Media Studies* (pp. 161–165). New York University Press.

- Gray, K. L. (2012). INTERSECTING OPPRESSIONS AND ONLINE COMMUNITIES:

 Examining the experiences of women of color in Xbox Live. *Information,*Communication & Society, 15(3), 411–428.

 https://doi.org/10.1080/1369118X.2011.642401
- Grimshaw, M. (2007). *The acoustic ecology of the First-Person Shooter* [Dissertation, University of Boloton]. https://core.ac.uk/download/pdf/301020287.pdf
- Grimshaw, M., & Garner, T. A. (2014). Embodied Virtual Acoustic Ecologies of Computer Games. Oxford University Press. https://doi.org/10.1093/oxfordhb/9780199797226.013.011
- Gunn, J., Goodale, G., Hall, M. M., & Eberly, R. A. (2013). Auscultating Again: Rhetoric and Sound Studies. *Rhetoric Society Quarterly*, 43(5), 475–489. https://doi.org/10.1080/02773945.2013.851581
- Haji-Akbari, A. (2018, April 9). Disability Parking Spots Yet to Be Filled. *Inside Higher Ed*. https://www.insidehighered.com/views/2018/04/09/higher-ed-needs-new-approaches-hiring-faculty-members-disabilities-opinion
- Hall, S. (1996). Questions of cultural identity. Sage.
- Hall, S. (2017). *The Fateful Triangle: Race, Ethnicity, Nation* (K. Mercer, Ed.). Harvard University Press.
- Hawk, B. (2018). *Resounding the Rhetorical: Composition as a Quasi-Object* (1st ed.). University of Pittsburgh Press.
- Hernández, L. H., & Munz, S. M. (2021). Autoethnography as assessment: Communication pedagogies as social justice activism. *Communication Teacher*, *35*(3), 229–246. https://doi.org/10.1080/17404622.2021.1923769

- Hiramoto, M., & Pua, P. (2019). Racializing heterosexuality: Non-normativity and East Asian characters in James Bond films. *Language in Society*, 48(4), 541–563. https://doi.org/10.1017/S0047404519000381
- Hofmann, M., Kasnitz, D., Mankoff, J., & Bennett, C. L. (2020). *Living Disability Theory:**Reflections on Access, Research, and Design. 13.

 https://doi.org/10.1145/3373625.3416996
- Horkheimer, M., & Adorno, T. W. (2002). *Dialectic of enlightenment: Philosohpical fragments* (G. S. Noerr, Ed.; E. Jephcott, Trans.). Stanford University Press.
- Howard, D. (2015). The Virtual Haydn: Complete Works for Solo Keyboard. *Journal of the American Musicological Society*, 68(2), 465–475.
- Iwamura, J. N. (2011). Virtual Orientalism: Asian Religions and American Popular Culture.
 Oxford University Press.
- James, R. (2019). *The Sonic Episteme: Acoustic Resonance, Neoliberalism, and Biopolitics*.

 Duke University Press.
- Johnson, L. K. (1996). Secret Agencies: U.S. Intelligence in a Hostile World. Yale University Press.
- Khrebtan-Hörhager, J., & Avant-Mier, R. (2017). Despicable Others: Animated Othering as Equipment for Living in the Era of Trump. *Journal of Intercultural Communication**Research*, 46(5), 441–462. https://doi.org/10.1080/17475759.2017.1372302
- Khrebtan-Hörhager, J., & Kim, M. (2020). Re-membering comfort women: From on-screen storytelling and rhetoric of materiality to re-thinking history and belonging. *Quarterly Journal of Speech*, 106(4), 427–452. https://doi.org/10.1080/00335630.2020.1828606

- Lax, G. L. (2021). Beyond the Bodyfucked: Mapping a Politics of "Trans Game Studies."

 Authors & Digital Games Research Association, Australia. https://digraa.org/wp-content/uploads/2021/02/DiGRAA2021_paper_18.pdf
- Li, S. (2013). Stereotyping and De-Stereotyping in Chinese ELT Context. In S. A. Houghton, Y. Furumura, M. Lebedko, & S. Li (Eds.), *Critical Cultural Awareness: Managing Stereotypes through Intercultural (Language) Education*. Cambridge Scholars Publishing.
- Lippman, W. (1922). Public Opinion. Harcourt, Brace & Co.
- Ma, S. (2017). Sinophone-Anglophone cultural duet. Palgrave Macmillan.
- Ma, S.-M. (2007). East-West montage: Reflections on Asian bodies in diaspora. University of Hawai'i Press.
- Ma, S.-M. (2020). Off-white: Yellowface and Chinglish by Anglo-American Culture. Bloomsbury Academic.
- Martey, R. M., & Consalvo, M. (2011). Performing the Looking-Glass Self: Avatar Appearance and Group Identity in Second Life. *Popular Communication*, *9*, 165–180.
- McRuer, R. (2006). *Crip theory: Cultural signs of queerness and disability*. New York University Press.
- McRuer, R. (2019). In Focus: Cripping Cinema and Media Studies: Introduction. *JCMS: Journal of Cinema and Media Studies*, 58(4), 134–139. https://doi.org/doi:10.1353/cj.2019.0042.
- Morley, D., & Robins, K. (1992). Techno-orientalism: Futures, foreigners and phobias. *New Formations*, 16. https://doi.org/10.4135/9781446261477
- Morley, D., & Robins, K. (1995). In Spaces of Identity: Global Media, Electornic Landscapes, and Cultural Boundaries (1st ed.). Routledge. https://doi.org/10.4324/9780203422977

- Morris, C. E. (2002). Pink herring & the fourth persona: J. Edgar Hoover's sex crime panic.

 Quarterly Journal of Speech, 88(2), 228–244.

 https://doi.org/10.1080/00335630209384372
- Muñoz, J. E. (2009). Cruising Utopia: The Then and There of Queer Futurity. New York University Press.
- Nadesan, M., & Kim, L. (2021). The Geopolitics of Public Memory: The Challenge and Promise of Transnational Comfort Women Activism. *Women's Studies in Communication*, 1–20. https://doi.org/10.1080/07491409.2021.1954119
- Novak, D., & Sakakeeny, M. (2015). Introduction. In D. Novak & M. Sakakeeny (Eds.), *Keywords in Sound* (pp. 1–11). Duke University Press.
- Pak, H.-J. (2016). News Reporting on Comfort Women: Framing, Frame Difference, and Frame Changing in Four South Korean and Japanese Newspapers, 1998-2013. *Journalism & Mass Communication Quarterly*, 93(4), 1006–1025. https://doi.org/10.1177/1077699016644560
- Peake, B. (2012). Listening, Language, and Colonialism on Main Street, Gibraltar.

 *Communication and Critical/Cultural Studies, 9(2), 171–190.

 https://doi.org/10.1080/14791420.2012.663094
- Perlson, J. E., Walters, O. C., & Keuroghlian, A. S. (2021). Envisioning a future for transgender and gender-diverse people beyond the DSM. *The British Journal of Psychiatry*, 219(3), 471–472. Cambridge Core. https://doi.org/10.1192/bjp.2020.124
- Pow, W. (2018). Reaching Toward Home: Software Interface as Queer Orientation in the Video Game Curtain. *The Velvet Light Trap*, 81(81), 43–56. https://doi.org/10.7560/VLT8105

- Rapoza, K. (2017, February 15). Are Americans Really That Afraid of Russia? *Forbes*. https://www.forbes.com/sites/kenrapoza/2017/02/16/are-americans-really-that-afraid-of-russia/?sh=5e4faa746e17
- Re, D. E., O'Connor, J. J. M., Bennett, P. J., & Feinberg, D. R. (2012). Preferences for very low and very high voice pitch in humans. *PloS One*, 7(3), e32719–e32719. PubMed. https://doi.org/10.1371/journal.pone.0032719
- Robertson, S. (2022, March 3). VALORANT Champions skin bundle has reportedly generated \$18.7 million in revenue. *Dot Esports*. https://dotesports.com/valorant/news/valorant-champions-skin-bundle-has-reportedly-generated-18-7-million-in-revenue
- Roh, D. S., Huang, B., & Niu, G. A. (2015). *Techno-Orientalism: Imagining Asia in speculative fiction, history, and media*. Rutgers University Press.
- Ruberg, B. (2020). The Queer Games Avant-Garde: How LGBTQ Game Makers Are

 Reimagining the Medium of Video Games. Duke University Press.

 https://doi.org/10.1215/9781478007302
- Ruberg, B., & Shaw, A. (Eds.). (2017). *Queer Game Studies*. University of Minnesota Press; JSTOR. http://www.jstor.org/stable/10.5749/j.ctt1mtz7kr
- Sabbagh, D. (2021, December 14). Cyber review says UK and west in 'clash of values' with Russia and China. *The Guardian*.

 https://www.theguardian.com/technology/2021/dec/14/cyber-review-warns-uk-and-west-in-clash-of-values-with-russia-and-china
- Said, E. (1979). *Orientalism* (1st ed.). Vintage Books.
- Said, E. W. (1983). The world, the text, and the critic. Harvard University Press.

- Sailor, S. (2020, May 12). Valorant Accessibility First Impressions (Featuring Andy Cortez from Kinda Funny Games). *Can I Play That?*https://caniplaythat.com/2020/05/12/valorant-accessibility-first-impressions-featuring-andy-cortez-from-kinda-funny-games/
- Sano-Franchini, J. (2018). Sounding Asian/America: Asian/American Sonic Rhetorics,

 Multimodal Orientalism, and Digital Composition. *Enculturation: A Journal of Rhetoric,*Writing, and Culture. http://enculturation.net/sounding-Asian-America
- Segura-Garcia, J., Montagud-Climent, M., Mirasol-Menacho, S., & Oleza-Simó, J. (2019).

 Theatrical virtual acoustic rendering with head movement interaction. *Artificial Intelligence for Engineering Design, Analysis and Manufacturing*, 33(3), 359–368.

 https://doi.org/10.1017/S0890060419000192
- Shah, Sonia. (1997). *Dragon ladies: Asian American feminists breathe fire* (S. Shah, Ed.). South End Press.
- Shaw, A. (2015). *Gaming at the edge: Sexuality and gender at the margins of gamer culture*.

 University of Minnesota Press.
- Shohat, E., & Stam, R. (2014). *Unthinking Eurocentrism: Multiculturalism and the Media* (2nd Edition). Routledge.
- Sicart, M. (2014). Play matters. The MIT Press.
- Skelchy, R. P. (2021). Auditory and spatial regimes of United States colonial rule in Baguio, Philippines. *Sound Studies*, 7(2), 187–205. https://doi.org/10.1080/20551940.2020.1857621
- Smith, J. O. (2010). *Physical Audio Signal Processing*. Stanford University Center for Computer Research in Music and Acoustics.

- Spade, D. (2015). Normal Life: Administrative Violence, Critical Trans Politics, and the Limits of Law. Duke University Press.
- Squires, C. R., & Brouwer, D. C. (2002). In/Discernible Bodies: The Politics of Passing in Dominant and Marginal Media. *Critical Studies in Media Communication*, *19*, 283–310.
- Sterne, J. (2003). *The Audible Past: Cultural Origins of Sound Reproduction*. Duke University Press.
- Sterne, J. (2012). *The sound studies reader*. London: Routledge.
- Sterne, J. (2018). A Groove We Can Move To: The Sound and Sense of Quebec's Manifs Casseroles, Spring 2012. In J. Alexander, S. C. Jarratt, & N. Welch (Eds.), *Unruly Rhetorics: Protest, Persuasuion, and Publics*. University of Pittsburgh Press.
- Stewart, A. A. (1918). Stereotyping. In *Electrotyping and Stereotyping: A Primer of Information*About the Processes of Electrotyping and Stereotyping: Vol. Part I. United Typothetae of America.
- Stewart, D.-L. (2017). Trans*versing the DMZ: a non-binary autoethnographic exploration of gender and masculinity. *International Journal of Qualitative Studies in Education*, *30*(3), 285–304. https://doi.org/10.1080/09518398.2016.1254302
- Stoever, J. L. (2016). *The Sonic Color Line: Race and the Cultural Politics of Listening*. New York University Press.
- Stone, C., & Bigham, S. (2020, August 17). Future Vision: The Glitchpop Story. https://playvalorant.com/en-us/news/dev/future-vision-the-glitchpop-story/
- Stryker, S. (2017). *Transgender history: The roots of today's revolution* (Second edition.). Seal Press.

- Stubbs, M. (2020a, June 3). "Valorant" Skins are Not Overpriced, Here's Why. *Forbes*. https://www.forbes.com/sites/mikestubbs/2020/06/03/valorant-skins-are-not-overpriced-heres-why/?sh=6765c5207154
- Stubbs, M. (2020b, July 22). New Oni Skin Set in "Valorant" Features Evolving Phantom Skin. *Forbes*. https://www.forbes.com/sites/mikestubbs/2020/07/22/new-oni-skin-set-in-valorant-features-evolving-phantom-skin/?sh=6d6c33c5b36e
- Sullivan, M. (2021, March 18). 'Not racially motivated'?: The Atlanta spa shootings show why the media should be wary of initial police statements. *The Washington Post*. https://www.washingtonpost.com/lifestyle/media/media-police-statements-atlanta-spa-shootings-jay-baker/2021/03/18/83f1b438-87ec-11eb-8a8b-5cf82c3dffe4_story.html
- Taylor, T. L. (1999). Life in Virtual Worlds: Plural Existence, Multimodalities, and other Online Research Challenges. *The American Behavioral Scientist (Beverly Hills)*, *43*(3), 436–449. https://doi.org/10.1177/00027649921955362
- Tronchin, L., Merli, F., & Dolci, M. (2021). Virtual acoustic reconstruction of the Miners'

 Theatre in Idrija (Slovenia). *Applied Acoustics*, *172*, 107595.

 https://doi.org/10.1016/j.apacoust.2020.107595
- Trotta, D. (2016, December 7). U.S. transgender people harassed in public restrooms: Landmark survey. *Reuters*. https://www.reuters.com/article/us-usa-lgbt-survey-idUSKBN13X0BK
- Vats, A., & Nishime, L. (2013). Containment as Neocolonial Visual Rhetoric: Fashion,

 Yellowface, and Karl Lagerfeld's "Idea of China." *Quarterly Journal of Speech*, 99(4),

 423–447. https://doi.org/10.1080/00335630.2013.833668
- Vorländer, M. (2020). Auralization: Fundamentals of Acoustics, Modelling, Simulation, Algorithms and Acoustic Virtual Reality. Springer International Publishing AG.

- Watson, S. (2019). The Unheard Female Voice. *The ASHA Leader*, 24(2). https://doi.org/10.1044/leader.FTR1.24022019.44
- Westwood, A. (2011). *The Little Book of Clichés: From everyday idioms to Shakespearian* sayings. Canary Press eBooks.
- Woodward, G. (2021). *The Sonic Imperative: Sound in the Age of Screens* (1st ed.). The Perfect Response.
- Zedd talks about his "Spectrum" skin collaboration with Valorant. (2021, September 8). *Groove Cartel*. https://thegroovecartel.com/news/zedd-spectrum-skin-bundle-valorant/