

NACVGM Program Abstracts

Day 1: June 12, 2021

8:45am–9:00am Welcome (Peter Smucker)

Note: All times are given in EST

9:00am–10:30am Session 1: Worldbuilding

9:00am–9:30am Worldbuilding Through Preexisting Music and Remediation in the Kingdom Hearts Series (Stefan Greenfield-Casas)

The now-classic PlayStation 2 game *Kingdom Hearts* (2002) was the result of a synergetic collaboration between two media powerhouses: Walt Disney Studios and SquareSoft. In the game, characters from both franchises cohabitate the many in-game “worlds” players must save from evil. These worlds are largely built upon the settings of Disney movies (e.g., the “Halloween Town” world based on Disney’s *Nightmare Before Christmas* (1997)), with Kingdom Hearts composer Yoko Shimomura oftentimes arranging the original music from these films to be incorporated into the game. Here, then, preexisting music literally contributes to the process of worldbuilding.

In this paper, I draw on the Kingdom Hearts series (2002—present) to show how arrangements of preexisting music can be used as worldbuilding devices across and between franchises. I accomplish this by expanding upon James Buhler’s (2017; cf. Godsall 2019) notion of musically “branding” the franchise, considering the politics of what happens when two media franchises are merged. Drawing on the writings of Robert Hatten (1994, 2014) and David Neumeyer (2015), I analyze this dialogic relationship between preexisting and newly composed music through the lenses of markedness and audiovisual troping, expanding these theories to the level of the franchise. I conclude the paper by considering how “Dearly Beloved”—Kingdom Hearts’ main theme—has similarly been arranged for the concert hall, thus bridging our “real” world with the virtual world(s) of the game series through an asymmetrical and marked process of remediation.

9:30am–10:00am Evoking the Past: (Historical) Authenticity vs. (Gameplay) Authenticity in Ancient Greece (Stephanie Lind)

In his book *Unlimited Replays*, William Gibbons identifies that game designers “often will appeal to what players *think* they know about music history. In other words, they find a sweet spot between, on the one hand, conforming slavishly to historical fact and, on the other, alienating players by stretching reality too far”.¹ Such practice is common in historical games, and can even create new intertextual frames of reference that are brought forward into players’ new gaming experiences.

The *Assassin's Creed* series is one particular example of this phenomenon. With each game situated in a particular historical time and place, the music helps to create authenticity for the player – but this is authenticity to the expected gaming experience, not to the historical reality being emulated. For *Assassin's Creed: Odyssey*, the composers have acknowledged that they use modern-day instruments to imitate instruments that might have been available at the time.² However, the resultant music in many ways leans more towards evoking the typical sounds of action games with its continuous fast rhythmic pulse, dramatic dynamic swells, and underlay of digital glissando effects (see, for example, https://youtu.be/fwthw9Sy_RU).

This presentation will include soundscape analyses of examples from *Odyssey* and *Hades*, two games evoking Ancient Greece, that identify how musical cues both evoke players' expectations of 'authenticity' but also actively communicate information significant to gameplay (modelled on Summers).³ Analyses will be presented alongside video from the game to show how these two components build immersion for the player.

1 William Gibbons, *Unlimited Replays: Video Games and Classical Music*, New York: Oxford University Press, 2018, p. 31.

2 <https://viralbpm.com/2018/10/07/the-flight-share-thoughts-on-their-assassins-creed-odyssey-soundtrack/>

3 Tim Summers, *Understanding Video Game Music*, Cambridge: Cambridge University Press, 2017, p. 117.

10:00am–10:30am *Mono no aware* and musical ruins in *The Legend of Zelda: Breath of the Wild* (Jordan Stokes)

The Legend of Zelda: Breath of the Wild (2018) is built around the principles of fragility and decay. Its landscape is dotted with ruins and the rusting machinery, wreckage of half-forgotten wars. Even the player's weapons break. Where earlier games in the franchise were structured around the acquisition of capability, *Breath of the Wild* draws inspiration from the aesthetic principle of *mono no aware* (the pathos of physical transience), and the Romantic fascination with fragment and ruin.

These principles shape the soundtrack as well. Over four decades, the *Zelda* franchise has built up a stable of leitmotifs: the overworld theme, the discovery fanfare, etc. Every game in the franchise draws on these, and *Breath of the Wild* is no exception. But here we find the ruins of the music. The leitmotifs are stripped down, made fragmentary, reduced to mere sound -- and there's startlingly little music in any case.

But in other moments, the music plays with the all the vigor that we'd usually expect. The distribution of the "decayed" music and the more traditional gestures maps onto the game's internal division into an immersive wilderness exploration game, a cerebral physics puzzle, and a frenetic combat simulator. The music also, to an extent, revitalizes the hoary game-studies concept of ludonarrative dissonance, for while the makers may sell us a game set in a broken world, they can't sell a game that is itself broken.

10:30am–10:45am Break

10:45am–11:45am Session 2: Fight!

10:45am–11:15am Who’s the Boss? Differentiating Battle Theme Types in Japanese Role-Playing Games (Alan Elkins)

Recent scholarship concerning the battle music of Japanese role-playing games (JRPGs) has tended to focus on individual soundtracks: the treatment of temporality in *Final Fantasy XII* (Greenfield-Casas 2017) and *Heroes of Might and Magic* (Kinne 2017), the depiction of Kefka’s character arc in *Final Fantasy VI* (Plank 2017), and the usage of rock and sacred music topics in *Xenoblade Chronicles* (Yee 2020). While these studies offer valuable insights into specific works, attempts to theorize about this repertoire more broadly have been less often explored.

In this paper, I demonstrate the ways in which composers differentiate between standard JRPG battle themes and music reserved for encounters against tougher enemies (“boss fights”) through the use of semiotically marked musical characteristics associated almost exclusively with the latter category. I begin with a brief summary of salient characteristics that differentiate battle music from other JRPG theme types. Then, I discuss several ways in which boss music is aurally distinguishable from standard battle themes: longer introductory passages, a slower tempo, specific changes in orchestration, and an increased use of chromatic harmony (with a focus on a handful of common paradigms). While not every boss theme uses all of these techniques, my survey of over 100 JRPG soundtracks written between 1986 and the present day suggests that the features in question are almost non-existent in standard battle themes, while the vast majority of boss themes employ one or more of these techniques to create the sense of gravitas associated with encounters against more difficult foes.

11:15am–11:45am The Pulse of Combat: Rethinking Diatonic Rhythm through RPG Battle Music (Ross Mitchell)

RPG battle themes are some of the most beloved tracks from their respective games, and not simply out of the player’s sheer exposure to them over the course of a game. Battle themes are designed to be thrilling accompaniments to tense gameplay, and one of the key musical parameters with which many of them generate this tension is rhythm. In my survey of RPG battle themes from the 80’s and 90’s, I find a preponderance of rhythms that belong to Jay Rahn’s category of “diatonic rhythm” (Rahn, 1996). Mark Butler’s study of Electronic Dance Music demonstrates the “energetic quality” of a certain subset of diatonic rhythms that also appear with great frequency in RPG battle themes, and describes them as “a particular strategy for creating rhythmic interest” (Butler, 2006). However, while diatonic rhythm provides a useful way for conceptualizing these particular rhythms, the repertory of RPG battle themes also contains many rhythms that are phenomenologically similar to their diatonic cousins, and are used in near identical ways, but do not meet Rahn’s strict mathematical criteria to belong in the category. By drawing on examples from *Secret of Mana*, *Suikoden II*, and especially the *Final Fantasy*

franchise, I propose a new category called “propulsive rhythm,” partially overlapping with Rahn’s diatonic category, in order to bring theory and practice closer together.

Works Cited

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11:45am–11:50am Trivia Break

11:50am–12:20pm Single Session

11:50am–12:20pm Variations on a Theme by K.K. Slider: Variation Sets and the Hourly Music of *Animal Crossing: New Horizons* (Nathaniel Mitchell)

In *Animal Crossing: New Horizons* (2020), players socialize, build, and explore an infectiously cartoony island community against a backdrop of equally infectious music. This backdrop consists of continuously looping music that changes every hour, on the hour; producing a daily cycle of 24 compositions tagging each hour to a distinctive sonic identity. But though such cycles have long been a series hallmark, in *New Horizons*, for the first time, each miniature is constructed out of motivic materials from the game’s title track. With this change, *Animal Crossing*’s signature cyclic soundscape has been centered around a reference point, effectively transforming it into a set of variations on a theme ascribed to the fictional canine composer, K. K. Slider.

At one level, the variation techniques in *New Horizons* are deeply familiar: each hourly composition selectively elaborates materials from the title track and brings them into new topical fields. But unlike the variation sets of classical music, these techniques operate within a non teleological, ludic frame, in which variations are environments to be immersed in rather than aesthetic objects to enjoy attentively. Players are thereby encouraged simultaneously to regard the cycle as an index for the routines and schedules of the virtual world and to build mental links between temporally disparate play spaces that are tagged to similar musical motives. By bringing variation techniques into a temporally distended and non-teleological space of play, *New Horizons* thus unlocks new ways of understanding the functions of motivic reminiscence, analogical thought, and topical recognition in musical experience.

12:20pm–1:45pm Lunch

1:45pm–2:15pm Single Session

1:45pm–2:15pm Ode to Joysticks: Canonic Fantasies and the “Beethoven of Game Music” (William Gibbons)

From symphony orchestra marketing copy, to newspaper articles, to academic publications, to Wikipedia, claims that *Final Fantasy* composer Nobuo Uematsu is the “Beethoven of game music” are surprisingly consistent throughout the diverse reception of video game music since the early 2010s. Despite its omnipresence, however, this bold comparison is seldom to never substantiated in any meaningful way. Why Beethoven? And what does it actually *mean* to label Uematsu this way?

Although there is little to support a musical comparison of Beethoven and Uematsu, there are nonetheless meaningful parallels between the two in terms of reception and canonicity. Both composers, for example, have a reputation built on normalizing and extolling a “Heroic” style that makes up a relatively small portion of their output. Likewise, each composer reaps the benefits of, in Tia DeNora’s words about Beethoven, “a complex network...constructed and oriented to the production and perception of his talent.”

Through engagement with both ludomusicology and Beethoven reception studies, this study explores questions of how and why this network transformed a prog-rock keyboardist turned game composer into “the Beethoven of game music.” Interrogating and contextualizing Uematsu’s enduring Beethovenian connections sheds significant light on the development of musical canons, on the relationship between game music and the classical canon, and on the widespread cultural impact of both composers today.

2:15pm–2:20pm Trivia Break

2:20pm–3:50pm Session 3: Trauma and Madness

2:20pm–2:50pm From Fantasy to Trauma: Sound and Sex in *School Days* (Ko On Chan)

The anime adaptation of *School Days* concludes with two murders, a decapitation, and a laceration into a girl’s womb. This contrasts with the original game, a visual novel in which players make decisions as the male protagonist between provided options, which lead the narrative to different endings and pornographic animations. Players typically enjoy unlocking all possible endings and collecting sex scenes to fulfill various fantasies, which requires navigating repeatedly through a tree structure of plot routes and developing a multi-perspective

understanding of different characters' psychological development.

The anime adaptation, however, compresses the parallel routes into one chronological narrative and takes inspiration from the three Bad Endings of the game that feature death scenes. In doing so, the anime adaptation removes all fantastical elements and reinterprets sex primarily as traumatic and catalytic of the protagonists' doomed fate. This change, I posit, is further marked by the differences in how sound is employed in the two media.

While dreamy digital tunes always accompany the sensual moaning in pornographic scenes in the game, sexual activities in the anime adaptation are mostly implied visually or verbally without any musical accompaniment. This lack of musical commentary, for example, creates disturbance in the audience, especially when characters engage in unethical sexual behaviors. In providing a case study of *School Days*, this paper thus pinpoints the different ways by which music shapes the perception of sexual imagery in game and in anime, from fantasy to abhorrence.

2:50pm–3:20pm Identity Crisis: Trauma, Memory Error, and Thematic Disassociation in the *Final Fantasy* Series (Richard Anatone)

Trauma and memory error are both crucial narrative devices in JRPGs. The Eastern *Kishōtenketsu* approach to story-telling helps to slowly reveal the protagonists' motivations and backstories, which are often rooted in memory-altering traumatic experiences (Kowert 2020). This is perhaps best exemplified in the *Final Fantasy* franchise: many of the stories involve protagonists that experience significant memory error and crisis of identity due to some tragic event from their past (Kelly 2020; Hughes and Orme 2020). Unsurprisingly, Nobuo Uematsu's leitmotivic scoring highlights these traumatic experiences by blurring the rhetorical boundaries among character themes, main themes, and *idée fixes*, resulting in a form of *thematic disassociation*, resulting in significant—and often unaddressed—interpretive questions regarding the symbolism between the game's narrative and its soundtrack.

Here, I identify four compositional techniques that lead to such thematic disassociation: eponymous omission, associative troping, motivic networking, and the double *idée fixe*. These techniques are present in all of Uematsu's soundtracks from the SNES and PlayStation era, and are crucial in shaping the musico-ludic narrative of their games. Pairing each technique with different games, I show how purposely obfuscating musical identity leads to a stronger understanding of the game's narrative. Through careful manipulation of musical topics, tropes, motivic development, and harmonic complexes, these techniques reflect the psychological trauma that their respective protagonists experience while slowly revealing the true "intangible aspect" of the game's narrative over its game-long trajectory (Phillips 2014). I conclude by advocating for more integrated approaches to leitmotivic analysis that includes psychological character analysis, demonstrating the power of both association and disassociation.

3:20pm–3:50pm A Succession of Pitches and Witches: Musical Constructions of Madness in *Final Fantasy VIII* (Tanner Jobes)

There are many things about *Final Fantasy VIII* that make it seem strange. *Final Fantasy VIII* (hereafter FF8,) challenged and reinvented many conventional elements of the *Final Fantasy* series. Deviations from established norms are noticeable in the gameplay, setting, narrative, graphics, and of course, music. It is also the first series title to feature not the electronic synthesized voice, but the recorded human voice in its music. However, the recorded voice is used sparingly, only appearing in seven out of the seventy-four tracks from the official soundtrack. These tracks often share a recurring vocal motif: the sounding of the phrase “Fithos Lusec Wecos Vinosec.”

The motif takes on an association with madwomen (realized in-game as sorceresses,) and therefore, the narrative meaning attributed to the motif can be understood through Susan McClary’s essay “Excess and Frame: The Musical Representation of Madwomen.” Additionally, William Gibbons’ article “Song and The Transition to ‘Part-Talkie’ Japanese Role-Playing Games” argues that early recorded voice in video games is significant because it draws attention to the narrative. Using both McClary and Gibbons’ writings as a theoretical lens, I will examine two instances of the motif. By taking a closer look at how narrative meaning is attributed to these instances, I aim to demonstrate that FF8 relied on gendered music conventions in order to chart unfamiliar territory into the realm of recorded voice.

3:50pm–4:00pm Break

4:00pm–5:00pm Keynote: Austin Wintory

5:00pm–7:00pm Dinner

7:00pm–8:30pm NACVGM Concert, Featuring:

88-bit, Piano

Sarah (Seoin) Chang, Piano

The Game Brass

Scott Penick, Guitar (multitrack)

Theremintendo Entertainment System

Viola Quartet: Joshua Dieringer; Kelsey Farr; Abby McGreehan; Mounir Nessim

Avatar Orchestra Metaverse

DiscoCactus

Media Musicians Conglomerate

Dana Plank, strings (multitrack)

Matthew Thompson, Piano (duet)

Day 2: Sunday, June 13th

8:30am–10:00am Session 4: Rewards and Conflicts

8:30am–9:00am Dynamic Music and Player Achievement in Video Games (Marcos Acevedo-Arús)

In video game studies, dynamic music refers to music that adapts according to changes in the game state. This can take the form of an added textural layer upon reaching a specific area in a level, as happens in *Celeste* (2018), or a transition to another track entirely upon beginning a new phase of a boss fight, like in many *Final Fantasy XIV* (2013) encounters. In this paper, I analyze cases in which dynamic music and player achievement are linked, present methods to categorize dynamic music based on the degree of changes in the game state and music, and explore the complex interaction between games, music, and player affect by drawing on previous ludomusicology scholarship on dynamic music (Collins, Summers, Medina-Gray) and Mihaly Csikszentmihalyi's work on flow. Major case studies include the battle themes of *Devil May Cry V* (2019) that increase in intensity as players attain a higher "style rank," the credits song of *Nier: Automata* (2017), and the Tartarus theme of *Persona 3* (2006) that slowly shifts throughout an entire playthrough. An analysis of the mechanics of dynamic music linked to player achievement reveals a wide diversity of strategies and approaches composers and audio programmers take that form a wide spectrum ranging from small surface-level changes in texture or tempo to drastic, ear-catching style changes. Music can thus serve as a reward that provides players with positive feedback on their performance, generating greater engagement in a game as these moments become impactful and memorable.

9:00am–9:15am *Otogarden*: Exploring Musical Improvisation in Digital Games (Constantino Oliva)



Fig. 1 – *Otogarden* illustration

This paper presents the ludomusicological research associated with the development of a digital game: *Otogarden* (Oliva, 2021). If “making an actual game [...] is useful to materialize the design question [or] aesthetic issues [...] that are being addressed” (Khaled, Lessard, & Barr, 2018), *Otogarden* is intended as a playable support to research on musical participation in digital games, focusing on musical improvisation.

While digital games afford a remarkable variety of possible musicking (Oliva, 2017; 2019a; 2019b), examples related to musical improvisation remain few and underexplored, with most games favoring rigid, score-based interactions, as made popular by titles such *Guitar Hero* (Harmonix, 2005) or *Rock Band* (Harmonix, 2007). In similar examples, music is presented as “a task to be achieved, a disciplinary activity in which the player should “play” again and again until the game (and thereby music) is mastered” (Kassabian & Jarman, 2016). Crucially, in these examples “music” is understood as pre-recorded compositions performed with the aid of simplified notation (Biamonte, 2011).

Otogarden challenges this understanding of “music game”, by focusing on musical improvisation, “an activity of enormous complexity and sophistication, or the simplest and most direct expression” (Bailey, 1993, p. 83, 84). Players of *Otogarden* are able to repeat short phrases through the use of a “loop” mechanic, musicalizing potentially extra-musical (Kahn, 1999, p. 103) acoustic juxtapositions. While retaining the “intimate and reactive musical bond” (Grimshaw, Tan, & Lipscomb, 2013) typical of the music game genre, *Otogarden* does not feature canonic game characteristics, such as a winning condition, compatibly with recent understandings of game definitions (Juul, 2019, p. 224). The conclusions show that it is possible to deliberately stimulate the players’ perspective (Aarseth & Calleja, 2015) on the game towards a musical direction, rendering manifest the musical possibilities connected with digital game engagement (Oliva, 2019c).



Fig.2 – *Otogarden* screenshot.



Fig. 3 – Ototogarden screenshot

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9:15am–9:30am Seeing Musical Rhythm: Audiovisual Disruption in *Thumper* (Sara Bowden)

Through rich use of formal and semantic audiovisual (in)congruence, *Thumper* (2016) presents a complicated task to its players: see the rhythm, play the rhythm, and don't look back. Entrusted with guiding a beetle at the center of the screen along a track filled with light up musically articulated "notes" in the form of obstacles, curved walls, and spikes, players navigate each level by visually identifying notes and aurally placing them within their correct location in the metrical context (and on the controller).

Rhythm games typically highlight missed notes and combinations aurally (Miller 2009; Kerins 2013; Costello 2016; Shultz 2016). In *Thumper*, disruption is both a singular musical/visual/tactile event as well as a process: the immediate visual area lights up with red debris, the controller buzzes angrily, and the soundtrack skips a beat. If players miss more than two notes, the soundtrack changes to repeat the section until players score well enough to move on. Disruption thus constitutes a ludonarrative process reliant on players' ability to hear and look ahead. Drawing on Battey's spatial metaphors to describe music in terms of its agreement/disagreement, consonance/dissonance, and fusion/independence, I argue that the use of audiovisual (in)congruence encourages players to see, hear, and feel audiovisual disruptions as musical disruptions (Battey 2015). An audiovisual analytical approach foregrounds the experience of disruption as both event-based and generative while capturing the viscerally felt disruptive dimension of the procedural programming used in the game's visual design and soundtrack (Iwamiya 2013).

9:30am–10:00am Virtuosoic Play in *Super Mario Maker 2* (William R. Ayers)

Nintendo's *Super Mario Maker* franchise integrates two distinct experiences, that of "game designer," through the level creation system, and that of "player," in the form of traditional 2D platforming. The franchise enhances these roles by incorporating musical composition tools, turning some designers into composers and players into musical performers who must execute precise inputs to make their way through a given piece (or level). These composition tools

expand on the “restricted” musical capabilities of *Mario Paint* (described in Plank 2016); musical note blocks placed within a level can access a chromatic pitch space (based on a block’s height) and a wide array of instrumental timbres (through interactions with numerous enemies and objects), but they also interweave (and in many cases overlap) with traversable platforms. By combining game design, composition, gameplay, and musical performance, *Mario Maker* provides a complex ludomusical system, complete with a unique notation for performers (called indicators), stylistic conventions (including a novel approach to form), and a devoted playerbase, fandom, and subculture. By considering two pieces from music level creator com_poser, this presentation will demonstrate that the composition tools in *Super Mario Maker 2* promote a high level of gameplay performance commensurate with (and corresponding to) virtuosic musical performance. Music level creators often require players to “earn the music” through technical gameplay ability, necessitating a form of ludic sight-reading that many players develop and rehearse. The presentation will examine this sight-reading practice to illustrate how the expansion of compositional materials leads to more exacting gameplay.

10:00am–10:15am Break

10:15am–11:45am Session 5: Ethical Interactions

10:15am–10:45am The Sound of Falling Giants: Hedonic and Eudaimonic Tensions in the Music of *Shadow of the Colossus* (Andrés Almirall Nieves)

The field of media studies has grappled with the seemingly paradoxical enjoyment of media that evokes a mixture of both positive and negative emotional responses. Put simply: Why do we enjoy engaging with media that makes us feel “bad”? Mary Beth Oliver and media scholars after her have identified the desire to engage with such material as part of a binary framework between hedonic and eudaimonic motivations. In this framework hedonic experiences are those which produce positive, primarily sensory pleasure, while eudaimonic experiences inspire deeper contemplation, posing weighty questions about the human condition.

Though some work on this topic has engaged with video games (Solomon 2017, Isbister 2017, Oliver and Ferchaud 2019), research on its application to their music is lacking. The 2001 game *Shadow of the Colossus* provides a particularly insightful case study for the role of music in shaping a eudaimonic gameplay experience. This critically acclaimed game, often held up as an example of video games as art, centers around the tension between hedonic enjoyment (the fun and thrilling experience of battling a colossus) and the more complicated eudaimonic impact of realizing that killing these colossi is morally wrong. The moral implications of the player’s actions are communicated primarily through the game’s music, specifically the contrast between exciting, heroic in-battle music and the mournful music heard after a colossus is defeated. Through my analysis, I show that the soundtrack’s intersections with the gameplay experience establish and intensify the game’s eudaimonic effect.

10:45am–11:15am Playing and Listening to the Sounds of Extraction, Collection, and Curation (Kate Galloway)

Catching bugs and digging up fossils in *Animal Crossing* and donating them to Blathers at the Natural History Museum on my recently colonized island, extracting rocks and clearing grass for my expansive farm outside Pelican Town in *Stardew Valley*, and operating surveillance technology to extract data concerning the behaviour and habitat squirrels in *Nuts*. Each of these entertaining causal games uses animation, simulation, sound, and music to engage with the actual world issues of resource and cultural extraction, collection, and curation. In this presentation I ask: How is actual world resource and cultural extraction animated, scored, and represented through sound effects and design in games? The “sounds of extraction” and “extractive music” refers to music where compositional and listening practices ambiguously serve as an ecological remedy while also inflicting environmental harm. For example, this includes the sonic environments of animated “foreigners” discovering remote islands, settling, exploiting their natural resources in games with narratives focused on community settlement, agricultural development, and the energy and extractive industries. It also includes the extraction of sound from a site using field recording equipment and relocating it into the sound design of a game’s animated environment. Grounded in ethnographic approaches to game audio, I sketch out how the sounds of resource use, regeneration, and extraction are encoded in sound and music in the animation of interactive gameplay moments and in cutscenes. These are games where animated representations of actual world environmental issues and human-natural resource relations/power dynamics are played out in an interactive audiovisual environment.

11:15am–11:45am Racialized Fantasy: Authenticity, Appropriation and Stereotype in Super Mario Odyssey (Thomas B. Yee)

Denunciations of racism and whitewashing in the live-action adaptation of *Avatar: the Last Airbender* erupted over its all-White casting of protagonists in a fictional world saturated with Asian and Native American influences. But why should racial representation matter in fantasy worlds? The reason may be termed *racialized fantasy* – designing a fantasy world’s culture with traits associated with a particular *real-world* culture (Chien in Malkowski and Russworm 2017). After the 2020 death of George Floyd resulting in worldwide cries for racial justice, examining racial representation in video game music is crucial. *Super Mario Odyssey* sparked controversy over its Mexico-themed Tostarena world, widely criticized by Latinx communities. However, the case’s specifically-musical considerations remain underexplored, and detailed music-theoretical analysis yields fruitful results.

Producer Yoshiaki Koizumi describes *Super Mario Odyssey*’s central theme as ‘world travel,’ affording a tantalizing case study of musical globalism in a fantasy gameworld. I analyze two tracks from Sand Kingdom Tostarena and two from Bowser’s Kingdom, respectively influenced by Mexican and Japanese music (Tawa 2020, Acevedo 2020). One possible approach evaluates based on *authenticity* – fidelity to the original culture’s musical traditions. However, all four exhibit both congruence with and divergence from tradition; additionally, discourse over authenticity ultimately contributes to dynamics of commodification, appropriation, and power (Spooner 1986, Said 1979). An alternative lens employs *stereotype* to identify problematic

cultural representation, drawing on scholarship in media studies, exoticism, orientalism, and ‘world music.’ The critical distinction now becomes clearer; whereas the music of Bowser’s Castle moves beyond simple exoticism to a productive blend of Japanese and European styles, Tostarena’s score trades on stereotypical mariachi music as a marker of difference rather than its own rhetorical argument. Music-semiotic analysis thus justifies critique of Tostarena’s soundtrack, articulating a heuristic for discerning problematic racial representation.

11:45am–11:50am Trivia Break

11:50–12:20pm Single Session

11:50pm–12:20pm Game Sound as Educational Space (Leonard A. Grasso)

Synergizing fields such as music theory, computing, musicology, cognition, and psychology (among others), the study of game music has been approached from many directions. However, research on pedagogical usages of game music is still emerging. While many education scholars have tackled game-based-learning (Bourgonjon et al, 2013; Simões, Redondo, & Vilas, 2013; Beavis, Muspratt, & Thompson, 2015; Hamari et al, 2016), music education has remained largely distant from ludomusicology. I intend to bridge that gap by examining the intersections of game music and sound, player interaction, and learning. My research synthesizes the work of Naxer (2020) and Grasso (2020), as the latter has studied affective player experience regarding music and the former has considered the pedagogical implications of game elements in a music learning environment. The purpose of this phenomenological study was to explore experiences around learning and sound in video games. The project aims to answer the following research questions: How do players construct meaning from game sound? What are the educational spaces created by the interaction of game sound and players? Participants (N = 7) engaged in a virtual focus group interview designed around the popular model of Twitch streaming, as well as subsequent individual virtual interviews. Data was analyzed using a combination of narrative analysis and traditional qualitative “en vivo” coding techniques of interview transcripts and Zoom chat text. In this presentation, I will offer the findings of my research as well as suggestions for video game music pedagogy in music education settings and beyond.

12:20pm–1:30pm Lunch

1:30pm–2:00pm Single Session

1:30pm–2:00pm Open Form: Music, Narrative, and the Limits of Convergence in Video Games and Cinema (Jim Buhler)

Video game music research has focused extensively on the active nature of gaming engagement to distinguish it from related media such as films and television, where engagement is said to be primarily passive. This formulation is misleading in several respects:

- it conflates the players' mode of engagement with the game with their engagement with the music
- it ignores that music is often most foregrounded when used for titles and cut scenes, the scenes that most resemble cinema
- it discounts that games are only rarely structured so players have any real control over the music
- it misconstrues sound effects, which players do not so much play as the sound effect is a property of action

In this paper I analyze this situation and consider music in terms of the different investments in narrative that film and video games provide. The difference in engagement with music in video games lies in its more open form that relates to its repetitive nature, which almost always requires replay of certain segments. The more closed form of cinema allows music to have a generally tighter fit with narrative, less need for repetition, and more directed development that follows the narrative. Any difference in musical engagement between video games and other media forms occurs at this level of open and closed forms, the relation of music to narrative, and especially its repetition with habitual action rather than with an active or passive investment by the player (of the video game) or audience (of film or television).

2:00pm–2:05pm Trivia Break

2:05pm–2:50pm Session 6: Final Fantasies

2:05pm–2:35pm Playback (Only?) As Intended: Reflections on Research into the Music of *Final Fantasy XIV: A Realm Reborn* (Stephen Tatlow)

How do the ludic and social aspects of play interact during research into multiplayer games and how might this alter analyses of the game? This paper reflects on the specific difficulties of engaging with research into Massive Multiplayer Online Role-Playing Games (MMORPGs) and explores several different methods for research-play in a multiplayer environment based on research undertaken between 2018 and 2020 into the music of the MMORPG *Final Fantasy XIV: A Realm Reborn*.

Music in *Final Fantasy XIV: A Realm Reborn* changes during collaborative play experiences, which alters the social experience of the game. As the research had a specifically multiplayer focus, questions surrounding methodology arose: how can the same play event be observed from multiple perspectives simultaneously? A variety of approaches were tried: utilisation of international gaming communities, participation in game-specific communities, “multi-boxing”, LAN-style multiplayer experiences and others. These led to sufficient success required for the completion of the research, but each method had implications for how the game music was received. Players of MMORPGs engage with the game in substantially different ways and are not always conscious of how this affects the musical experience of the game: in what ways could this research be considered ethnographic, or considered hermeneutical? Do these terms have specific value within the study of multiplayer games, where community involvement may be essential to understanding how players perceive and interpret the game-text?

2:35pm–2:50pm Remaking Music for Modern Sensibilities: A Case Study in Music Design and Implementation Across Generations from *Final Fantasy VII* to *Final Fantasy VII Remake* (Kyle Worrall)

In 1997 SquareSoft (later Square Enix) released the critically acclaimed *Final Fantasy VII*, with a soundtrack consisting of 85 MIDI tracks making use of the PlayStation’s internal sound chip¹ and a proprietary engine². These reactive tracks responded to player behaviour by transitioning between pieces to match gamestate/location (i.e. combat, world map). Comparatively, the remake has 156 audio tracks which make use of many contemporary music integration principles (Stevens & Raybould, 2016; Phillips, 2014; Sweet, 2015). Arguably, the most prevalent problem arising in video game music in Japanese Role Playing Games (J-RPG’s) is that of excessive repetition resulting in listener fatigue (Berlyne, 1976). The effects of listener fatigue are brought about by a combination of three factors; non-linear gameplay, long form storytelling and limited data allowance for music (Collins, 2009; Marks, 2009; Stevens & Raybould, 2016). This case study compares and contrasts these soundtracks to understand how a classic has been re-imagined and implemented for the modern audience, whose tastes in and expectations of game music have developed markedly in the intervening twenty three years. We suggest that the application of these techniques diminishes the likelihood of listener fatigue, by making the most of each song and leitmotif in inventive ways. This case study suggests that the methods used in *Final Fantasy VII Remake* soundtrack are a potential framework to follow for composers who are updating classic soundtracks and who are conscious of reducing listener fatigue, while maintaining the integrity and listenability of the original music^{3 4 5}.

1 Information taken from an online translation of a 1997 interview with the Square Enix development team, available online: <http://shmuplations.com/ff7/>.

2 A full breakdown of this game engine is available online: <http://gears.sourceforge.net/gears.pdf>.

3 The *Final Fantasy VII Remake* soundtrack is being performed in concert now, showing the listenability of this revamped soundtrack: <https://ffvii-remakeconcerts.com/>.

4 Listenability of this soundtrack is supported by *Final Fantasy VII Remake* winning the Music and Score award at The Game Awards 2020.

5 Numerous positive reviews are available online discussing the *Final Fantasy VII Remake* soundtrack: <https://techraptor.net/gaming/features/best-game-music-2020-final-fantasy-vii-remake>.

2:50pm–3:00pm Break

3:00pm–4:00pm Session 7: Gender In and Out of Games

3:00pm–3:30pm Game Boys and Gear Porn: Corporeality, Fetishization, and Gender in the World of Chip Music (Dominique Pelletier)

Content warnings: fetishization, objectification, toxic masculinity, gender bending/transition

Chiptune is a breeding ground for heated discussions about hardware. Indeed, the embodied source of chip sounds, “the chip”, has been its primary distinction from other musical instruments. With time and the evolution of synthesis, software, emulation, and sampling, chiptune has expanded well outside the body of the chip. Diverging discourses related to identity politics colliding around the chiptune label have shifted the dynamics around hardware and its (re)appropriation. As retro modding finds popularity, consoles get scarcer and musicians and composers are turning to more accessible means of production, frowned upon by die hard hardware heads. Through categorizations like “fakebit” to designate sampled or emulated chiptune that isn’t generated by “the chip”, what was once a repurposing of videogame consoles morphed into a form of purism.

Fetishized alongside its peripheral musical apparatus, the chiptune retro game console is now its very own brand of gear porn. But the art of console modding for music is also a form of expression, indissociably linked to the music-making process. Opposing the fantasy of “plug and play”, altering consoles to become the optimal instrument for their player can range from circuit to gender-bending, as is commonly seen with the Nintendo Game boy, which, outside of its commercial context, takes on a whole new identity. Based on my experience as a console modding chip musician and previous literature on chiptune, this paper is a reflection on how chiptune is embodied, and the ways which chiptune bodies shapeshift through time.

3:30pm–4:00pm 2B or Not 2B: Representations of Gender in Nier: Automata (Hayden Harper)

It is no secret that the video game industry codifies gendered stereotypes, which appear in marketing campaigns promoting games to specific audiences, in mechanics and visual illustrations of characters in games, and in various video game genres. In this paper, I scrutinize the construction of gender in the musical elements of soundtracks in role-playing games. Expanding upon Michael Austin’s work (2018), I examine how musical gender construction compares with the visual and interactive representations of gender on the screen.

Using *Nier: Automata* as the primary case, I employ neo-Riemannian theory to demonstrate how harmony and texture subvert typical gendered expectations established by other role-playing games like *Final Fantasy VII*. For example, many boss-battle music cues in *Nier: Automata* showcase harmonic progressions employing slide transformations. Moments like these replace

the historically-masculinized aeolian “victory cadence” first established in the original *Super Mario Bros.* and later adopted by the *Final Fantasy* series.

However, a conflict exists when we contrast musical observations with the visual and interactive elements. Hypersexualization of main character Android “2B,” portrayals of male fantasy, and hegemonic power dynamics comprise some of the gendered stereotypes experienced in-game. A ludomusical dissonance sustains between the aural and visual images of the main characters. This specific disjunction characterizes only one of the various relationships between the gendered musical and visual elements in video games. In examining the gendered ludomusical dissonance in *Nier: Automata*, my paper shows that dissecting musical representations of gender, in relation to the visual and interactive constructions, transforms unnecessarily gendered perceptions.

4:00pm–4:15pm Break

4:15pm–5:30pm Session 8: Composition and Production

4:15pm–4:30pm Composing for Chinese Instruments (Ian Chen)

With the increasing number of games made in China and for the Chinese market, it is becoming essential for composers to learn the ins and outs of writing for Chinese traditional instruments in an authentic way. In this presentation I go over how I used various traditional instruments in combination with a Western orchestral template to create an award-winning videogame soundtrack.

First I start by introducing some of the most used instruments and their related instrumental families, including the *hu*-s, the flutes, the lutes, and various percussions. Then I talk about how they’re typically used in Chinese traditional music, and how they can be used alongside a Western orchestral setup: orchestrational techniques that include or feature an authentic Chinese sound. Lastly, I go through one of my tracks to demonstrate how the techniques are used in a published work. I will then talk about my experience working with musicians of a traditional background, and how to transcribe Western staff to Chinese *JianPu* staff so that the players can more easily understand and interpret the written music.

4:30pm–5:00pm Punch up the Jam: Yuzo Koshiro’s *Streets of Rage 2*, from Soundtrack to Techno Tracks (Trent Clark Leipert)

Yuzo Koshiro music for *Streets of Rage 2* has long received popular and critical praise. Its inventive and varied numbers offer a compendium of club music styles, most notably, techno. As part of Sega’s slew of early 90s street fighter beat-em-ups, *SoR 2* was integral to the “console war”, during which Sega’s Genesis vied with Nintendo’s Super Nintendo Entertainment System.

Despite the improved speed and graphics of these third-generation consoles, the Genesis used a Yamaha YM2612 sound chip, a six-channel FM synthesizer from the late 80s that was not significantly different from the sound chips of earlier consoles. While chip tune composition is often described in terms of adaptation to its technical constraints, I suggest that we approach the soundtrack of *SoR 2* in terms of its possibilities for technological and stylistic *recreation*.

I analyze several tracks from *SoR 2* in terms of sound production and style in order to highlight their close affinity with various techno sub-genres. I argue that rather than being considered as a limitation, the YM2612 sound chip allowed Koshiro to closely emulate the technological capabilities and stylistic features of early techno music. He thereby created tracks that not only sounded *like* the drum machines and synthesizers used to create techno, but essentially *were* techno. As demonstrated from its subsequent afterlife among chip tune and techno enthusiasts, Koshiro's *SoR 2* tracks would even come to function *as* the very club music that first inspired the composer.

5:00pm–5:30pm Face-Melting Counterpoint and Chiptunes: Composing the Score for *Mystiqa: The Trials of Time* (Brent Ferguson)

Composing a soundtrack for a game that fits retro specifications requires both technical knowledge as well as compositional techniques linked to both counterpoint and popular music. I recently completed the score for *Mystiqa: The Trials of Time*, a roguelike dungeon crawler made using the specifications for Game Boy that will be released for the Nintendo Switch in 2021. I worked with the sole creator, Julian Creutz, through an 8-bit game jam. Creating a soundtrack within the limited specifications of the Game Boy was a challenge. Rather than programming through OpenMPT, I utilized the PAPU plugin in Finale. For the game jam version, *Tower of Time* (2020), I relied heavily on three tracks of two square waves and a noise channel for percussive effects. This quickly became an exercise in two-voice counterpoint, and many of my compositions for this game are either in styles of neo-classical or progressive rock. For the full game, Julian proposed that I could alter the music slightly by adding effects or having more than the two square waves. While all but two cues utilize the three track texture, I do add effects as the player progresses through the game, such as reverb and delay. The penultimate boss features a minor mode arrangement of the “Queen of the Night” aria from *The Magic Flute* by Mozart, but the other 22 cues are original. In this presentation, I describe the process and the technical aspects of creating the music for this game.