



Conference Program Booklet
January 16-17, 2016
Davidson, North Carolina



Hosted by Davidson College
Sponsored by the Department of Music, the Davidson
College Friends of the Arts, and the Davidson College
Public Lectures Committee

About the Conference

Now in its third year, the North American Conference on Video Game Music draws together scholars in the fields of musicology, music theory, ethnomusicology, media studies, sound studies, composition, and others for the purpose of considering all aspects of music in video games. Topics at past conferences have included case studies of influential games and composers, technology and its impact on game music, teaching game music, analyzing game music, and music's relationship to game narratives.

The first conference was the brainchild of William Gibbons, Neil Lerner, and Steve Beverburg Reale, and it was hosted by Youngstown State University in 2014 (Reale was the lead organizer) with a keynote presentation by Karen Collins. In 2015, Texas Christian University was our host, with Gibbons as the lead organizer, and Winifred Phillips gave the keynote presentation. In 2016, Davidson College is hosting the conference and Kiri Miller is the keynote presenter; the program and organizational committee consisted of:

Neil Lerner, lead organizer
James Buhler
Karen Cook
William Gibbons
Elizabeth Medina-Gray
Steven Beverburg Reale

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Conference Program

Saturday, January 16

8:00 Registration Opens

9:00 Welcome and Announcements

9:15–10:15 Session 1: Sound & Technology
Chair: Neil Lerner

“Music Minus One”: Timbral Adjustments and Compromises in First-Party FDS-to-NES conversions (ALAN ELKINS)

Genesis Does What Nintendon’t: Sound Chips and Composer Culture in the Early 16-Bit Era (KEVIN BURKE)

10:15–10:30 **BREAK**

10:30–11:30 Session 2: Creativity, Pedagogy, & Theory
Chair: Elizabeth Medina-Gray

Affording Musical Creativity in Video Games (PAUL TUROWSKI)

Glass Beads and Graphic Analysis: A Ludist Account of Contemporary Music Theory (STEVEN BEVERBURG REALE)

11:30–1:30 **LUNCH**

1:30–2:30 Session 3: Music, Enculturation, & Exoticism I
Chair: William Gibbons

Encultured Musical Codes in Bear McCreary's Video Game
Soundtracks (JOSEPH E. JONES)

Turned On: Sensuality and Sound in Early Games (DANA PLANK)

2:30–2:45 **BREAK**

2:45–3:45 Session 4: Narrative & Player Connection
Chair: Jim Buhler

Music in Video Game Trailers: A Preliminary Study (JAMES
DEAVILLE)

Musical Depictions of Failure in Coherent and Incoherent Worlds
(WILLIAM AYERS)

3:45–4:00 **BREAK**

4:00–5:00 Keynote Lecture: Kiri Miller

Kinesthetic listening: dance games, pop music, and embodied
interfaces

5:00–7:00 **RECEPTION**

Sunday, January 17

9:00–10:00 Session 5: Music, Enculturation, & Exoticism II
Chair: Steven Beverburg Reale

Levels of Reality and Artifice in *The Talos Principle* (ELIZABETH HAMBLETON)

Topics in Video Game Music: The Sky in Recent Nintendo Franchise Games (SEAN ATKINSON)

10:00–11:00 Session 6: Narrative & Time
Chair: Elizabeth Medina-Gray

Music in the Time of Video Games: An Approach to Musically Mediated Gameplay (JULIANNE GRASSO)

Shattered Dreams and Neo-Polyphony: Narrative in Final Fantasy X (STEFAN GREENFIELD-CASAS)

11:00-11:15 **BREAK**

11:15-12:15 Session 7: Music, Gaming, & Gender
Chair: Neil Lerner

“Awesome soundtrack, bro!”: How Gendered is Video Game Music? (MICHAEL AUSTIN)

Transgressing Four Dimensions of Gendered Dream Narratives: Musical and Spatial Androgyny in *NiGHTS Into Dreams* (STEPHEN ARMSTRONG)

12:15-1:30 **LUNCH**

1:30–2:30 Session 8: Compositional Techniques
Chair: Steven Beverburg Reale

Compositional Perspectives on the Music in Indie Games: The Case of *Fez* (TIM HARBOUR)

Playing the Game Designer's Game: Generating Music from a Single-Seed (DAN TRAMTE)

2:30-2:45 **BREAK**

2:45–4:15 Session 9: Borrowing, Parody, & Influence I
Chair: William Gibbons

The (Frying) Pan is Mightier than the Sword: Style and Parody in the Music of *Earthbound* (JUSTIN SEXTRO)

Assassin's Creed as a Case Study of Musical Historicity in Video Games (SARAH POZDERAC-CHENEVEY)

Changing Musical Functions of the Moonlight Sonata in Video Games (PETE SMUCKER)

4:15–4:30 **BREAK**

4:30–5:30 Session 10: Borrowing, Parody, & Influence II
Chair: Jim Buhler

Real Music meets Virtual Video Gaming: Virginia Tech's OPERAcraft Project (MICHAEL SAFFLE)

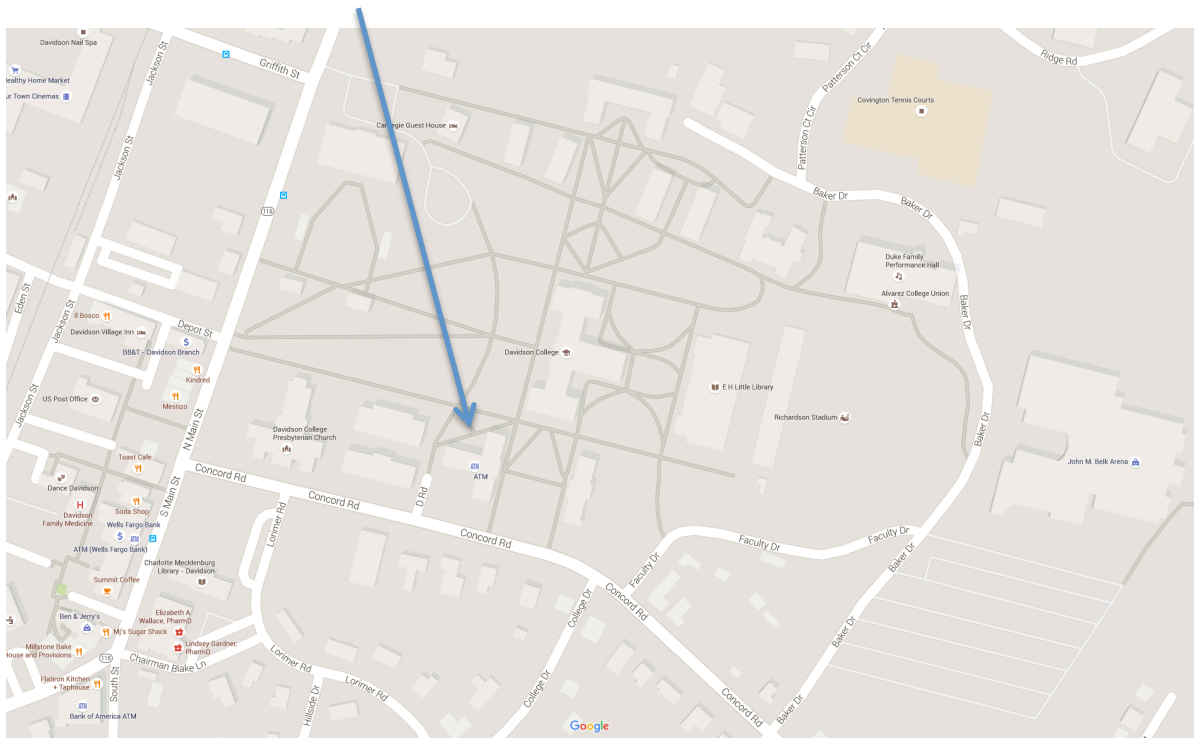
Peripheral Fantasies: Nobuo Uematsu, Misha Mansoor, and the Influence of Video Game Music on Progressive Metal (PATRICK SALLINGS)

Local Info & Nearby Dining Options

Welcome to Davidson, NC! I hope you have a pleasant stay in our little village, and if you need help figuring out something do seek me out and ask. (I don't have a cell phone but I'll be checking email throughout the weekend.) My email is: nelerner@davidson.edu. My home address is 514 Ashby Drive, in Davidson.

The conference will happen in the Sloan Music Center on Davidson's Campus. Sloan is on Concord Road, one of the main roads in Davidson, and it's a large brick building with columns (as are many other buildings). On this map, Sloan is indicated as having an ATM (it doesn't). You can park wherever you find an open space on Concord Road or any of the nearby side streets; there is a large lot near Belk Arena (left on Baker Drive from Concord) and that has ample parking when there is not a basketball game. (There is, however, a basketball game on Saturday at 12:30.)

Sloan Music Center (Tyler Tallman on 2nd floor)



Dining Options

A range of dining options are within walking distance of Sloan. Most of these are indicated on the map on page 10. There's a much bigger list of options if you drive down to Cornelius, Huntersville, or Charlotte, and I advise asking me and/or using Yelp.

Alvarez Student Union: a 5-minute walk across campus and you'll find the Davis Café, with all the typical fare desired by today's college students. \$

Brickhouse Tavern: traditional American fare including wood-oven pizzas and a large beer list. \$\$-\$\$\$

Campania: an Italian trattoria with pasta and mainly meat dishes. \$\$\$

Carrburritos: casual Mexican fare highlighting burritos and margaritas. \$-\$\$

Flatiron: New American fare and a full bar. \$\$\$

Fuel Pizza: a decent pizza joint, available by the slice or pie. \$

Kindred: recently listed as one of *Bon Appétit's* top 10 new restaurants in the country; book a reservation far in advance and bring a senior colleague to pay. \$\$\$\$

North Harbor Club: a bit further away (on the other side of I-77) but worth it to be right on the coast of Lake Norman; seafood options and full bar. \$\$\$\$

Pickled Peach: handcrafted foods highlighting local produce; open for lunch and dinner. \$\$

Mestizo: Mexican food for lunch and dinner. \$\$\$

Restaurant X: a European bistro open for brunch and dinner on Saturday, and only brunch on Sunday. \$\$\$

Soda Shop: what Norman Rockwell image would be complete without a soda shop? Decent veggie burgers as well as more traditional fare. \$

Summit Coffee: a local coffee shop with some pastries and noshes. \$

Toast Café: extremely popular for brunch, but also good sandwiches and a fine dinner menu. \$\$



Homewood Suites (Hotel)

SUBWAY® Restaurants
Saba Asian Bistro

I-77, Exit 30 =
Davidson College Exit

Sloan Music Building
(Tyler Tallman Hall on 2nd floor)

Millstone Bake House

Alvarez Student Union

ABSTRACTS

Session 1: Sound & Technology

“Music Minus One”: Timbral Adjustments and Compromises in First-Party FDS-to-NES conversions (ALAN ELKINS)

When Nintendo released the Famicom Disk System as a peripheral to the Famicom in February 1986, one of its more notable features was the addition of an extra sound channel, which allowed for the creation of more sophisticated timbres than the simple waveforms of the base hardware. Nintendo's own in-house composers and sound designers would make use of this channel to enrich their soundtracks and create sound effects that were not possible with the Famicom's original five channels; when it came time to release these games in the United States, however, those enhancements had to be dropped, since the FDS never received a release in the west.

The changes in sound design for the American versions of these titles - namely, *The Legend of Zelda*, *Metroid*, and *Kid Icarus* - were more nuanced than a mere cutting of one channel, however; Nintendo's programmers were careful to preserve the spirit of the original music and sound, which required careful reallocation and rearrangement of material to fit the entirety of the game's audio on five channels instead of six. This paper will examine changes between the Japanese and Western releases of the three aforementioned titles, discussing the technical and compositional motivations behind these changes, as well as their place in the broader context of advancements in sound design during the Famicom's early-to-middle years.

Genesis Does What Nintendon't: Sound Chips and Composer Culture in the Early 16-Bit Era (KEVIN BURKE)

This paper considers the technological makeup and resulting compositional practices of the Sega Genesis (i.e., Mega Drive), a home console system that uniquely straddles the 8-bit and 16-bit eras in sound design. I argue that the inclusion of both a traditional Programmable Sound Generator (PSG) and a newer Frequency Modulation (FM) chip provides a rare insight into sound culture among the various branches of the Sega Corporation and its third-party collaborators in Japan, the United States, and elsewhere.

The dual inclusion of PSG and FM sound chips was originally intended for

backward compatibility with cartridges from older consoles, a common practice for Sega, and offered composers something both retro and fresh, restrictive, yet liberating. An analysis of audio tracks from the game *Batman* (1989), *Batman Returns* (1992), *Lightning Force* (1992), and *Ecco the Dolphin* (1992), among others, illustrates several divergent approaches to the hardware. Carryovers from the 8-bit era like dual-channel echo and duty-cycle modulation continued in some practices, while new possibilities like stereo panning and detuning were not always employed. Instrument patches shared among in-house composers as well as various software programs for compiling sound data also figured significantly into shaping distinct styles and techniques with the sound chips. The Sega Genesis stands out from the Super Nintendo Entertainment System (SNES), its major competitor during the 16-bit era that upgraded completely to advanced sampling chips, in exposing how game composers would adapt to change when both new and old tools were available.

Session 2: Creativity, Pedagogy, & Theory

Affording Musical Creativity in Video Games (PAUL TUROWSKI)

All sound-producing video games afford musical creativity to some degree, though few are designed to consider such an affordance an integral part of the play experience. In such games, distinctions between game, instrument and composition are explicitly blurred.

In this paper, I focus on several aspects of games that intentionally afford musical creativity for players. Drawing from various sources, such as Nattiez's semiotics and Norman's design principles, I discuss the ontology of creativity-based music games and construct an analytical methodology. Through the constructed analytical lens, I look at specific case studies, including *Mario Paint*, *Electroplankton*, *Rock Band*, and *Panoramical*, describing their unique qualities and functions. Overall, this study aims to provide a deeper understanding of the philosophies and design choices behind games that emphasize musical agency for players.

Glass Beads and Graphic Analysis: A Ludist Account of Contemporary Music Theory (STEVE BEVERBURG REALE)

Many scholars adopt the term "ludomusicology" as shorthand for the academic study of music in video games, but Roger Moseley (2012) intended the term to

describe a scholarship of play as it informs both music and games. In so doing, Moseley draws a specialized focus on what McKenzie Wark (2007) calls “gamer theory,” a critical methodology steeped in the logic of gameplay that may be employed in the course of scholarly analysis. Casting scholarship as play is not a recent invention: historian Johan Huizinga’s influential *Homo Ludens* (1938) examines art, poetry, and philosophy as byproducts of the drive to play. Similarly, scholarship-as-play is a central theme of Hermann Hesse’s final novel, *The Glass Bead Game* (1943), concerning an isolated, monastic order of scholars playing the titular game by manipulating a secret language of hieroglyphs. The musicologically-minded reader for whom the glass bead game calls to mind Schenkerian techniques is vindicated when the novel reveals its origin as an exercise in musical analysis. Clearly, the discipline of music theory—with its rule-based systems of musical abstraction—is ripe for examination from the standpoint of gamer theory. This presentation draws Wark to Hesse and considers several glass bead games played by music theorists: the pedagogical pencil puzzle of part-writing, the second-order *Singgericht* of score analysis, and the literal real-time strategy game of diplomacy and resource management of which we, as academics, are constant players.

Session 3: Music, Enculturation, & Exoticism I

Encultured Musical Codes in Bear McCreary’s Video Game Soundtracks (JOSEPH E. JONES)

A common thread runs through the bulk of Bear McCreary’s scores: a fusion of live-recorded instruments drawn from the Western orchestra, various popular styles, electronic technologies, and a range of non-Western traditions. The combination of instruments in *Dark Void* (2010), *SOCOM 4* (2011), and *Defiance* (2013–) led commentators and McCreary himself to brand his music as exotic and eclectic with little attention paid to the multivalent nature of these terms and the degree to which they account for the style of his soundtracks.

Drawing upon McCreary’s own commentaries, online reviews, and remarks from executives and producers in the entertainment industry, I posit a framework through which this blending of traditions can be understood. Examination of critical reception through the lens of theories of exoticism and eclecticism as well as Claudia Gorbman’s cultural musical codes provides fresh insights into McCreary’s creative approach. While his scores often evoke the distant or unfamiliar, I argue that he rarely employs instruments to call to mind their native contexts. Instead, McCreary re-contextualizes them as dramatic signifiers that become encultured as the games progress. My

conclusions offer a model for assessing comparable soundtracks, which collectively reflect an ongoing interest in non-Western sounds and intercultural musical practices by the entertainment industry. For many composers working in small- and large-screen media, a consistent fusion of instruments and stylistic elements has become their primary practice, complicating traditional perceptions of exoticism and eclecticism.

Turned On: Sensuality and Sound in Early Games (DANA PLANK)

Pornography rarely sounds good. With its emphasis on purely visual modes of pleasure, music is typically relegated to kitsch; aesthetic wallpaper whose patterns and forms add little erotic affect to the action onscreen.

But what if the visuals imply more than they can depict? This is often the case for video games with explicit content for early consoles such as the Atari 2600, Commodore 64, and the NES. These systems' technical limitations gave rise to crass portrayals of nudity and sexual acts. And yet, despite its inherent intimacy, sound is often seen as an afterthought rather than as a way to complement and enhance a sensual ludic experience. Low-resolution samples of girls moaning and strangely juvenile music renders the pornographic content into parody, simultaneously winking and wanking at the audience.

This paper explores the uncomfortable sound of adult games, which aid the visuals in replicating problematic cultural discourses about the nature of (straight) male sexuality. Emphasizing a repetitive, simplistic linear progression to penetration, sex is linked to reward, conquest, entitlement, and transaction rather than intimacy and exploration.

These games are not “ineffective porn,” but perfect examples of a conflicted cultural relationship with the erotic. Pornography suffers from stigma and sensationalism, stilted by conflicting sexual mores that find this kind of stimulation necessary and yet wholly furtive and forbidden. Sound has potential to help us explore desire rather than mock or obscure it. By examining “bad” game sound, perhaps we can discover what sort of sound might actually turn us on.

Music in Video Game Trailers: A Preliminary Study (JAMES DEAVILLE)

Despite a market saturation and aesthetic standard rivaling those for their cinematic counterparts, video-game trailers have only received brief references in the trailer literature (Vollans 2014; Grainge/Johnson 2015). The situation is even less satisfactory for the study of their music (but see Phillips 2014: 145-149). Nevertheless these promotional videos—whether reveal, teaser, launch, or gameplay trailers—represent a rich field for investigating music’s dual register as marketing tool and art form, mediating “evocative space” in game play (Jenkins 2004: 123-124). Several scholars have analyzed music in film trailers (Davison 2014; Powrie/Heldt 2014), constructing frameworks for considering other trailer music.

As preliminary research into game-trailer music, this paper examines launch trailers, which are closest in style and tone to those for film. A general discussion of musical conventions and functions for trailers across formats is followed by analyses of music in select genre-related examples. Comparing soundtracks to the launch trailer for *Alien: Isolation* (sci fi/horror: 2014) to those in theatrical trailers for *The Edge of Tomorrow* (sci fi: 2015) and *Dracula Untold* (horror: 2014) reveals genre-based similarities and influences from current practices, including driving production music for action scenes and an ironically peaceful song by a popular artist (for *Alien: Isolation*, “Red” by Mirel Wagner). However, this launch trailer’s song text connects to the narrative, whereby the concurrent visual shift to first-person game play contributes another dimension to the music, positioning the player more directly within the trailer’s diegesis (Collins 2013: 54-55). Art and commerce conspire to sell the game experience.

Musical Depictions of Failure in Coherent and Incoherent Worlds (WILLIAM AYERS)

The success of a game’s narrative depends on the amount of agreement between the game rules and the narrative plot. An over-reliance on game structure can disturb the progression of narrative. For instance, failure in games is often represented by the death of the player character, but stories do not generally depict primary character death as viable; main characters of novels do not die and respawn three pages back to attempt the various plot points again.

Many video games do not address this conflict, allowing for “incoherent worlds” (Juul 2005) in which a character miraculously reappears after an unfortunate demise without narrative explanation. However, a number of games counteract this conflict by writing death into their narratives, allowing *players* to fail and

retry on the game level while allowing *characters* to “die” and respawn on the narrative level—for example, consider the Vita-Chambers of *Bioshock*, a narrative explanation for in-game death and the subsequent respawn.

Musical cues for deaths in incoherent worlds tend to intensify and augment player failure due to the narrative disturbance they cause, as in the death cues for *Metal Gear Solid* or *Uncharted*. Since deaths in coherent worlds do not disturb the narrative progression, the accompanying cues tend to enhance the world itself by focusing on sound effects and providing a sense of realism, as in the “desynchronization” sounds in *Assassin’s Creed*. This presentation will examine some musical depictions of failure in video games considering the coherency or incoherency of their narrative worlds.

Session 5: Music, Enculturation, & Exoticism II

Levels of Reality and Artifice in *The Talos Principle* (ELIZABETH HAMBLETON)

The Talos Principle is a 3D puzzle-solving game built on philosophical and religious tones in which the character Elohim has created a number of subworlds and levels like the Garden of Eden. As the player – an android, presumably alone after an apocalypse – explores these environments, the musical design of the game enriches the player’s experience, and also provides clues and questions to what is real and what is not. The music is just as key to gameplay as the visuals in unfolding the story. While the desolate, snowy overworld is convincingly real in its sonic and graphic depiction, the subworlds are somewhat more digital and glitchy. There is an intentional exoticism to the music of these subworlds, which uses an unorthodox blend of non-Western instruments to suggest a fantastical environment rather than one based on reality. Other clues subtly suggest that the world’s existence is unstable, furthering the artificiality. Certain sounds, including the voice of Elohim, are consistent throughout, while others are dynamic, shifting the player’s frame of relative reality. As the player uncovers evidence in gameplay that the overworld is also a digital invention and not actually reality, a twist discussed exhaustively in forums, the music loses fidelity and becomes more like that of the subworld tracks. I analyze and compare instrumentation and sound cues through the tracks that appear in different areas and times in the game, showing how attention to the sonic environment reveals crucial aspects of the game and reflects the information revealed in plot development.

Topics in Video Game Music: The Sky in Recent Nintendo Franchise Games (SEAN ATKINSON)

In a 2015 talk, William Ayers tackles narrative in video game music through the use of topics (specifically the martial and macabre topics) as they appear in the *Arkham* series of Batman games. Timothy Summers makes reference to topic theory as well in a 2012 article, but only tangentially in support of the complete texture of first-person shooters. While the application of those topical ideas supports the specific contexts of the games (dark and heroic for *Arkham* versus military in a game such as *Wolfenstein 3D*), it raises the question of whether a larger topical universe of video game music exists, one that shares concepts from classical genres, but differs in some way due to the nature of video games. What are the unique characteristics of video game music that would change the way topic theory is approached? Which topics exist comfortably outside of video game music, but are somehow different or altered when present in a video game? Are intertextual connections between topics in video game music similar to those found in classical genres? This talk will explore those questions through an examination of video game music associated with depictions of the sky, limiting the discussion to recent Nintendo franchise games. In general, the sky topic in video game music borrows from the pastoral, containing two essential components; sweeping upward melodic gestures and higher pitched timbres (frequently as harp glissandi). Games discussed include *The Legend of Zelda: Skyward Sword* (2011), *Super Mario 3D World* (2013), and *Mariokart 8* (2014).

Session 6: Narrative & Time

Music in the Time of Video Games: An Approach to Musically Mediated Gameplay (JULIANNE GRASSO)

The relation of music to temporality is a familiar subject in music theory, not least since Jonathan Kramer's *The Time of Music* (1988) grappled with several points of intersection in Western art music and beyond. Yet even if we take for granted Kramer's claim that music acquires meaning through time, this notion has yet to be explored in video game music analysis. Time in video games generally remains under-theorized beyond Jesper Juul's "Introduction to Game Time" (2004), which posits a duality between a game's pre-scripted unfolding of events (*event time*) and the "real" time it takes to play them (*play time*)—a distinction that draws on classic narrative divisions between "story" and

“discourse.” Expanding on Juul’s categories, I posit further distinctions within *event time* to encompass musical mappings of temporality in role-playing and adventure genres, from narratively oriented themes to the dynamic musical events that coincide with player action. Within this framework, I draw from cognitive musicology to analyze how these temporal scales are iterated through music, showing how music can guide player behavior by enacting the temporality of appropriate actions. Through iterating multiple temporal scales, music in video games is more than sonic decoration—it becomes a script for gameplay itself.

Shattered Dreams and Neo-Polyphony: Narrative in Final Fantasy X (STEFAN GREENFIELD-CASAS)

The Final Fantasy series has been an area of keen interest in video game music (Kizzire 2014, Cheng 2014, and Gibbons 2015), but less attention has been given to the later installments in the series, especially those developed for the PlayStation 2 and beyond. Though Dennis Washburn’s analysis (2009) of narrative in *Final Fantasy X* (2001) focuses on one of these later installments, he mentions music only in passing. My paper extends Washburn’s analysis to music, arguing that music is deeply entwined within the game’s narrative, serving to develop and delineate the game’s storylines.

Written by Masashi Hamauzu and Nobuo Uematsu, “Hymn of the Fayth” is treated in a provocative way in *Final Fantasy X*: it can be used to trace the development of polyphony within the history of Spira, the in-game world. The narrative addresses an extended chronological timespan that allows beings at different stages of cultural development to appear in the same game-world. Music helps to distinguish these beings: ancient and primitive beings are accompanied by historically “underdeveloped” arrangements of the hymn, and pivotal moments in the game (those which affect Spira’s future) are mirrored with drastic harmonic changes to the hymn. The hymn not only traces the passage of chronological time tied to in-game events, but also functions as a means of reinforcing the interpenetration of myth and history in Spira. This connected myth and history are in turn influenced by the player’s progress through the game.

Session 7: Music, Gaming, & Gender

“Awesome soundtrack, bro!”: How Gendered is Video Game Music? (MICHAEL AUSTIN)

The gender divide in video games is now more apparent than ever. In addition the perennial issues of representations of women as overly-sexualized female avatars that are seldom the protagonist of a game, the sexist undertones of video game culture have recently erupted with “Gamergate,” accompanied by vitriol, harassment, and death threats made to female gamers and scholars. Although the stereotypical gamer is a male teenager, 48% of America’s 190 million gamers are women, and to reach this audience, video game designers and publishers are “feminizing” games in an effort to appeal to their increasingly female audience, often in patronizing or misogynist ways. This more “feminine” aesthetic is often reflected in the type of music used in a game’s soundtrack.

In *Feminine Endings: Music, Gender, and Sexuality*, Susan McClary examines the ways in which music – vis. Western classical music—is shaped by constructions of gender, and explores the ways in which the discussion of this music is ultimately influenced by gendered discursive practices. In this essay, I expand McClary’s “provisional methodology” to investigate the music in video games, examining the ways in which a score contributes to or undermines the gendering of a game. I will begin by analyzing the music used in especially gendered video games, such as the hyper-masculine *Broforce* (2012) and hyper-feminine *Imagine Salon Stylist* (2009) and *Soap Opera Dash* (2010); I will go on to discuss music in other popular titles and the extent to which it interposes a (sometimes seemingly unintentional) gendered aesthetic.

Transgressing Four Dimensions of Gendered Dream Narratives: Musical and Spatial Androgyny in *NiGHTS Into Dreams* (STEPHEN ARMSTRONG)

NiGHTs Into Dreams (1996) is a video game of flight through idyllic dreamscapes and phantasmagorical nightmares. Inspired by the surreal aesthetics of *Cirque du Soleil* and the dream theories of Carl Jung, *NiGHTs* involves many layers of musical, spatial, and gender fluidity: the game features a variable soundtrack that reflects the interactions of the player and the dream environments, while the additional third and fourth/time dimensions help to negotiate the side-scroller and top-down perspectives of conventional two-dimensional games. Identifying with the androgynous character NiGHTs—a

flying jester-like persona who acts as both avatar and guide—frees protagonists Claris and Elliot to explore their gendered dream narratives.

NiGHTs has long been recognized within the gaming community for its sophisticated theoretical underpinnings and its innovative sound design, but ludomusicologists and game scholars have yet to investigate its themes in academic publications. In this paper, I examine the complex interactions of sound, space, and gender in *NiGHTs*, and I argue that the fluid sound design, the frequently-shifting third dimension, and the character NiGHTs are all androgynous elements that perform both liberatory and revelatory functions within the game. These varying parameters all develop toward the central narrative that underpins the entire game: that androgynous psychological structures are essential to the growth of the human psyche, and that the exploration, negotiation, and final overcoming of insecurities allows the mature personality to take flight.

Session 8: Compositional Techniques

Compositional Perspectives on the Music in Indie Games: The Case of *Fez* (TIM HARBOUR)

This paper examines the video game *Fez* (2012, Trapdoor), focusing on the interactive and adaptive nature of its soundtrack. I investigate the game's music system, dubbed Fezzer, that allowed for a particular kind of dynamic audio in the game. I draw on interview material with the game's composer, Rich Vreeland, in my consideration of the game's musical elements, as well as in my examination of how successfully what Vreeland calls "narrative" elements are carried by the often ambient score. I consider Vreeland's use of modal motifs to connect the music to gameplay states and scenes, foreshadowing areas of the game in order to create links, and also how the soundtrack characterizes the various locations in the game with music. My paper concludes with reflections on *Fez*'s distinctly indie approach to game music composition, with brief allusions to *Braid* (2009, Microsoft Game Studios) and *Journey* (2012, Sony Computer Entertainment).

Playing the Game Designer's Game: Generating Music from a Single-Seed (DAN TRAMTE)

'Single-seed procedurally generated' games have flourished recently, indebted to the processing power of new machines that allow extremely vast/detailed maps to dynamically render in real-time. In the forth-coming video game *No Man's Sky*, the map is as large as a galaxy, i.e., planets adhere to the scale of actual planets. As gamers visit new terrains, the graphics materialize as they approach, and completely unload as they depart, leaving a small footprint on the memory of the console. Yet if gamers choose to later return to the original spot, each blade of grass will be in its proper position. In computational terms, the universe does not exist when no one is looking, yet it is a stable universe, generated locally by the player's position-coordinates.

Using a single seed quasi-random algorithm to generate a map (effectively) infinite in scope is a clever way for a game designer to ensure that a universe can consistently reassemble without having to resort to storing an infinite amount of data on a hard drive. I believe that such an approach might be adapted to music composition. I thus propose 'single seed music,' examining its merits, technical challenges, and the conceptual obstacles that are likely to arise. I will supplement my paper with a demonstration of *Fever Dream*, a single-seed procedurally generated piece I wrote for piano, electronics, and iPad, comparing it to the mobile video game *Desert Golfing*, which I used as a compositional model.

Session 9: Borrowing, Parody, & Influence I

The (Frying) Pan is Mightier than the Sword: Style and Parody in the Music of *Earthbound* (JUSTIN SEXTRO)

Since its 1995 North American release for the Super Nintendo Entertainment System, *Earthbound* has gained a cult status among a devoted group of fans. Eschewing traditional role playing game tropes of mythic heroes slaying monsters with swords and magic, *Earthbound* instead follows a group of kids who travel through a modern suburbia as they attempt to save the world from destruction at the hands of an evil invading alien, Giygas. With baseball bats and frying pans as their weapons, the heroes fight a range of villains from robots to cranky old ladies and encounter fantasy elements superimposed on their normal world.

This presentation examines the stylistic influences extant in *Earthbound's* score, and the use of musical parody to reflect the narrative tone. Composers Keiichi Suzuki and Hirokazu "Hip" Tanaka have cited many examples of contemporary musical genres quoted in *Earthbound*. This stylistic melting pot provides intertextual references to *Earthbound's* parody of RPGs: electronic melodies akin to B-horror movies accompany a town infested with zombies, an island in the sky is imbued with Middle Eastern connotations using exaggerated musical markers, and tense battle music of typical RPGs is replaced with quotes from "Tequila" by The Champs. The score is an extension of *Earthbound's* playful take on the RPG genre, as each stylistic quotation emphasizes and pokes fun at the situations in which the characters are placed. It is a game that highlights the tropes of its medium yet appropriates them unapologetically.

Assassin's Creed as a Case Study of Musical Historicity in Video Games (SARAH POZDERAC-CHENEVEY)

While the *Assassin's Creed* series may not have achieved complete historical accuracy, it has generally succeeded in giving the impression of historical accuracy in the settings its player characters explore. In addition to using geography, architecture, and historical figures and events to create a clear sense of time and place for the player, the games also occasionally integrate pre-existing music into their primarily newly composed scores. Sometimes this is brought to the player's attention, as in *AC3's* performance of *The Beggar's Opera*, identified textually for the player, and the sea shanties of *AC4*, which are integrated into gameplay as a collectible for the player to find. Other inclusions are more subtle, as in the case of the saltarello barely audible above the hubbub of the carnevale crowds in *AC2*.

These games, with their varied uses of historical musics, offer an excellent lens for examining the use of music to convey their settings by considering the historicity of the music, the importance the game places on the music, and the interaction between the player and the music. While it is clear throughout that the games' creators have done their homework (*The Beggar's Opera* was staged six times at Covent Garden in 1754, the place and year identified in game), the most effective world-building music in the series is the collection of almost certainly anachronistic sea shanties in *AC4*. While historical accuracy is certainly important, it is not the only factor determining the success of music in this series and other games set in the past.

Changing Musical Functions of the Moonlight Sonata in Video Games (PETE SMUCKER)

This paper examines how a single piece of music changes in both function and meaning depending on its role within video games. Several studies show how pre-existing music for film creates multiple musical meanings (Gorbman 1987, 2006; Powrie and Stilwell 2006), while others include additional multimedia platforms (Long 2008; Collins 2008). The evolving roles of musical functions in video games allows for a re-examination of pre-existing music within increasingly interactive multimedia (Whalen and Taylor 2008; Gibbons 2009). My paper engages with these studies in two ways. First I develop a spectrum of game-play music functions that depend on the engagement of the gamer: non-game-play, game-play, and mediated game-play. Second, I examine four contrasting uses of Beethoven's Moonlight Sonata, demonstrating how different musical interpretations depend on their game-play function.

The soundscape in *Earthworm Jim 2* (1996) is an amalgamation of pinball sounds, gunshots, and the first movement of Moonlight Sonata. The music has a strict game-play function, serving as background music, yet the conjoined visual and aural spaces create inharmonious and hilarious juxtapositions of sight and sound. While a listener might have a predetermined expectation of Beethoven's music, the context of the gamer's engagement and the music's functional role within the game informs its interpretation. An expansion of this and three other examples provide a re-imagining of the function and roles of pre-existing music in video games.

Session 10: Borrowing, Parody, & Influence II

Real Music meets Virtual Video Gaming: Virginia Tech's OPERAcraft Project (MICHAEL SAFFLE)

Commercial video games occasionally make use of opera, including rock opera. The famous concluding scene from *Final Fantasy 6* references classical or conventional opera. *Grand Theft Auto III* is another example, although in that game operatic numbers can only be heard through a virtual radio, not 'live.' Furthermore, operatic music and even scenes could be inserted—and probably have been—into *Second Life* and other “virtual worlds.” In most of these cases, of course, the music is produced or at least encoded by game designers rather than players, with *Second Life* providing opportunities for players to create their own activities and even compose their own music. OPERAcraft is quite

different. Launched in 2013 and funded in part by a grant from the National Endowment for the Arts, the OPERAcraft project “engages K-12 students in the creation and performance of a fully produced virtual opera,” using music “borrowed from classic operas” but performed by students who “build a story and libretto” using a custom version of *Minecraft* to control their avatars on-screen. Here commercial videogaming meets live performances of canonical operatic numbers within a world of digitalized avatars, costumes, and sets. The aesthetic, economic, and educational possibilities and implications of OPERAcraft as a ‘next-generation video game’ opportunity raises such issues as child labor (in commercial performances), “virtual musical reality” (especially in terms of future developments), and the on-going transformation of ‘classical’ music into pop.

Peripheral Fantasies: Nubuo Uematsu, Misha Mansoor, and the Influence of Video Game Music on Progressive Metal (PATRICK SALLINGS)

The emergence of a new subgenre of progressive metal in the mid-2000s, informally known as “Djent,” is frequently traced to a few key artists, including Misha Mansoor of the band Periphery. When Periphery’s first album, *Periphery*, was released in 2010, it inspired a new movement in progressive metal marked by the use of extended-range guitars, complex rhythmic patterns, and virtuosic solos. Two additional features of Periphery’s music have affected the development of the subgenre: a continuous electronic backdrop between each song on a given album and a harmonic vocabulary that reaches beyond established metal norms. In various interviews, Mansoor mentions Nubuo Uematsu and the music of the Final Fantasy series as primary influences on the music he writes for Periphery. Uematsu’s influence could justify Mansoor’s incorporation of extra-metal elements into his music.

My purpose here is twofold: I will identify harmonic and textural connections common among the works of Uematsu and Mansoor, and I will then show how these harmonies and textures have been employed by other progressive metal artists. I argue that Mansoor effectually disseminated musical devices from the music of Uematsu to the progressive metal community, thereby bringing an element of game music before a new audience.
