〜 | Introduction

Beyond the Candelabrum

It is traditional for books about music to begin with a pithy quotation or an endearingly humorous anecdote to elucidate the central thesis of the volume. There will be a few anecdotes and many more quotations to come, but for this book on a non-traditional popular music, it is appropriate that I buck the trend and instead offer something in the modern aphoristic vernacular: an internet cartoon (Figure 0.1).

David Soames's 'The Ultimate Combo' still brings a smile to my face, even after years of familiarity with the cartoon, since, like all of the best jokes, it mischievously suggests more than it explicitly states. Soames's illustration satirizes the 'combo' – a phenomenon (particularly prevalent in fighting games) whereby players may deploy a particular sequence of commands in quick succession to increase the cumulative effect of the avatar's attacks. The fighter in the cartoon is thus able to produce progressively more elaborate assaults upon the unseen opponent, to the point of conjuring a fireball. In the fourth and final line of the cartoon, however, this complexity, comically *ad absurdum*, has been translated into a rather more benign manifestation.

Why should the last line of the cartoon link music and video games? And, furthermore, why is this funny? It might be the case that part of the humour comes from an implied linguistic pun. In English, amongst other languages, the word 'play' is used both when describing the action of performing using a musical instrument and for engaging with video games. Perhaps 'The Ultimate Combo' is linking the two senses of the word 'play' through deploying a pun – what Arthur Koestler described as 'two strings of thought tied together by an acoustic [or homographic] knot'.[1] But maybe these are not actually quite so separate meanings of the word 'play'. Unlike, for example, the famous pun-based exchange in *Airplane!* (1980), 'Can you fly this plane and land it?'/'Surely you can't be serious?'/'I am serious, and don't call me Shirley,' this case of 'play' is not a homograph or homophone, but the same word, common to two different but related

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[1] Arthur Koestler, *The Act of Creation* (London: Hutchinson, 1964): 65.

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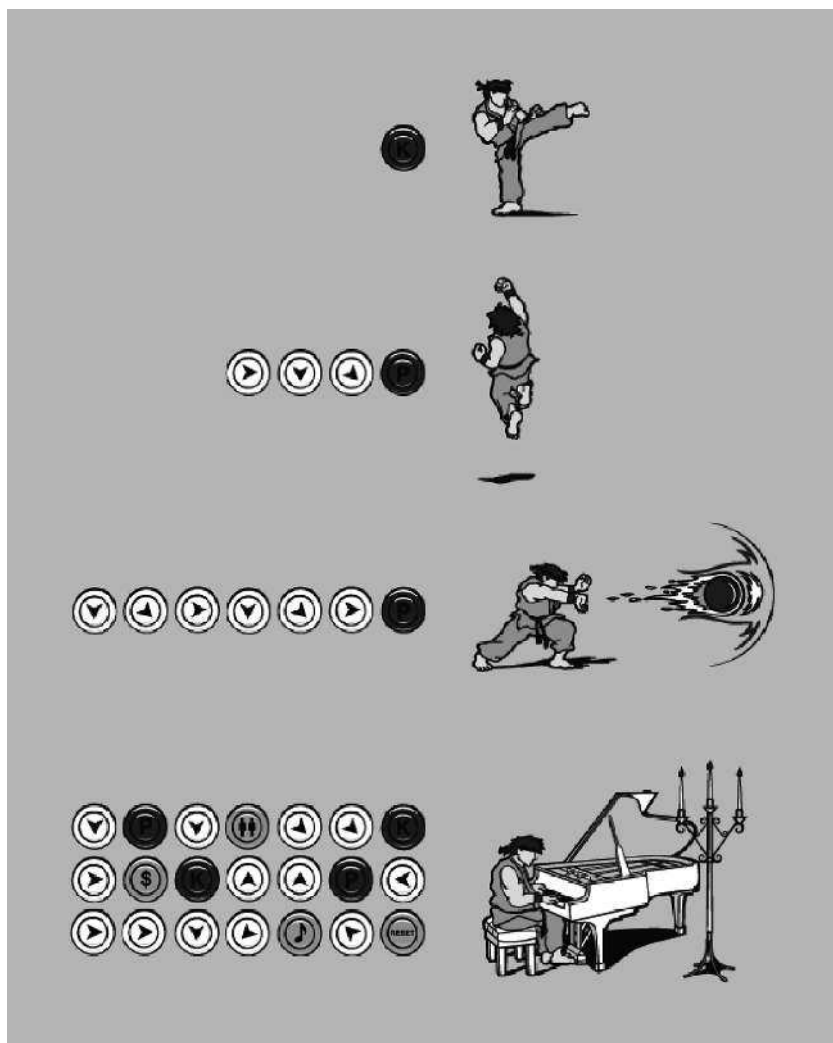
Figure 0.1 Cartoon: 'The Ultimate Combo' by David Soames. Used by kind permission of the artist. www.davidsoames.com

activities. 'The Ultimate Combo' suggests that there are not hard and fast constitutional differences between the play of music and the play of video games as we might imagine. If the fighter were to be shown acting on a stage in the final iteration, the humour would be pun-based, but with the invocation of musical performance, the pun of 'play' is ultimately a red herring – the humour lies at a more fundamental level of juxtaposition and similarity between playing games and playing musical instruments.

'The Ultimate Combo' connects the pressing of game controller buttons in a quick, carefully timed and precise manner with the manipulation of the piano keyboard by a virtuoso performer that exhibits these same qualities. Johan Huizinga suggested much the same in 1938, when he wrote (remarkably presciently) that '[I]t seems probable that the connecting link between play and instrumental skill is to be sought in the nimble and orderly movements of the fingers.'[2] Soames shows the similarity between the combinations of moves in fighting games and musical proficiency. This illustrates the notion of the 'virtuoso gamer' perfectly: Fighting game players will have invested significant amounts of time in playing particular games to learn the most effective combinations of attacks to deploy in any one situation. With no random commands, these players will know exactly when to press the buttons to initiate the assaults and deflect incoming attacks. The mode of play in fighting games seems closest to jazz musical improvisation, where members of a band will respond to each other and extemporize using complex chains of patterns within established modes of interaction. In the particular case represented by the cartoon, the button interface of the game is placed in parallel with the key interface of the piano.

The cartoon equates the play and performance of video games with the play and performance of music. It implies that these are not so distant incarnations of a similar phenomenon of play. They exhibit the same playful impulse, despite the incongruous image of the martial artist at the keyboard of a grand piano (complete with candelabrum, a symbol of nineteenth-century civility). We smile because we recognize the underlying symmetry between the activities of playing video games and playing music, despite the superficial difference between their physical and digital incarnations. In synthesizing music and gameplay together, this black-belt Liberace claims that there is a musical quality to the playing of video games and perhaps a mechanistic quality to performance. If we look beyond the candelabrum, we see the commonality of play.

Goals and Agendas

This book is about video game music. It is about music for fighting, music for racing a car, music for evading zombies, music for dancing, music for spying, music for solving puzzles, music for saving the Earth from aliens,

[2] Johan Huizinga, *Homo Ludens: A Study of the Play Element in Culture*, trans. R.F.C. Hull (London, Boston and Henley: Routledge and Kegan Paul, 1949 [1938]): 42.

music for managing a city, music for being a hero; in short, it is about music for playing. It is concerned with ways of understanding this music.

Music has been accompanying games for over thirty-five years (since at least *Space Invaders* (1978)), but it was only in the middle years of the 2000s that academic research began to discuss sound in games. As both a gamer and a musician, I find such scholarship enlightening and enjoyable. However, game audio research all too often avoids deep engagement with the specifically musical substance of games. Some headway has been made, particularly in relation to so-called music games like *Guitar Hero* (2005)[3] and *Dance Dance Revolution* (1998–2009),[4] and popular music in games (particularly in the *Grand Theft Auto* (1997–2013) series).[5] Despite the work of scholars such as William Cheng, Karen Collins, Isabella van Elferen, William Gibbons and Kiri Miller, there remains a dearth of detailed, explicit investigation of music in games.[6]

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[3] Dominic Arsenault, '*Guitar Hero*: "Not like playing guitar at all"?', *Loading...*, 2/2 (2008); Melanie Fritsch and Stefan Strötgen, 'Relatively Live: How to Identify Live Music Performances', *Music and the Moving Image*, 5/1 (2012), 47–66; Kiri Miller, 'Schizophonic Performance: *Guitar Hero, Rock Band*, and Virtual Virtuosity', *Journal of the Society for American Music*, 3/4 (2009), 395–429; Kiri Miller, *Playing Along: Digital Games, YouTube, and Virtual Performance* (New York: Oxford University Press, 2012); Roger Moseley, 'Playing Games with Music, and Vice Versa: Performance and Recreation in *Guitar Hero* and *Rock Band*', in Nicholas Cook and Richard Pettengill (eds.), *Taking it to the Bridge: Music as Performance* (Ann Arbor: University of Michigan Press, 2013), 279–318; David Roesner, 'The Guitar Hero's Performance', *Contemporary Theatre Review*, 21/3 (2011), 276–85; Peter Shultz, 'Music Theory in Music Games', in Karen Collins (ed.), *From Pac-Man to Pop Music: Interactive Audio in Games and New Media* (Aldershot, Hampshire and Burlington, VT: Ashgate, 2008), 177–88; Henry Svec, 'Becoming Machinic Virtuosos: *Guitar Hero, Rez*, and Multitudinous Aesthetics', *Loading...*, 2/2 (2008).

[4] Joanna Demers, 'Dancing Machines: 'Dance Dance Revolution', Cybernetic Dance, and Musical Taste', *Popular Music*, 25/3 (2006), 401–414; Jacob Smith, 'I Can See Tomorrow In Your Dance: A Study of Dance Dance Revolution and Music Video Games', *Journal of Popular Music Studies*, 16/1 (2004), 58–84.

[5] Karen Collins, 'Grand Theft Audio?: Popular Music and Interactive Games', *Music and the Moving Image*, 1/1 (2008a), 15–20; Kiri Miller, 'Jacking the Dial: Radio, Race, and Place in "Grand Theft Auto"', *Ethnomusicology*, 51/3 (2007), 402–38; Kiri Miller, 'Grove Street Grimm: *Grand Theft Auto* and Digital Folklore', *Journal of American Folklore*, 121 No. 481 (2008a), 255–85; Kiri Miller, 'The Accidental Carjack: Ethnography, Gameworld Tourism, and *Grand Theft Auto*', *Game Studies*, 8/1 (2008b).

[6] The work of Karen Collins forms the foundation for this field of study, see her volumes *Game Sound: An Introduction to the History, Theory and Practice of Video Game Music and Sound Design* (Cambridge, MA and London: MIT Press, 2008b) and *Playing with Sound: A Theory of Interacting with Sound and Music in Games* (Cambridge, MA and London: MIT Press, 2013). William Cheng's virtuosic volume *Sound Play: Video Games and the Musical Imagination* (New York: Oxford University Press, 2014) is the first book-length academic research monograph that specifically deals with video game music from a musicological-critical disciplinary perspective.

Unlike well-established areas of study, game music scholarship has yet to formulate a body of approaches to the music under consideration. For those seeking to find out more about game music, there is very little guidance on how to go about doing so, whether in the form of an outline of the practical techniques and methods of analysis, or concepts that may be used to interrogate the music. I here use the term 'analysis' in its widest possible sense, to refer to the concentrated study and investigation of music that includes, but is certainly not limited to, score-based examination. This broad understanding of analysis embraces critical hermeneutics alongside motivic dissection – it is appropriate that the diversity of analytical approaches reflects the similar diversity and multifaceted potential of the musical materials with which it deals. I also do not consider analysis as the exclusive domain of the academic; in internet blogs, forums and comments on websites, players engage with musical criticism, discussing and arguing about their experiences of the music. Game music analysis is already embedded in modern media culture, albeit in a form that has very different techniques and systems of appraisal to traditional musicology. Scholars working in a young field have a responsibility to open up the domain, making it accessible to wider audiences and equipping those who would follow with appropriate tools. This way, those who are seeking to understand the topic may avoid the mistakes of, and improve upon the successes of, those who have come before them.

The aim of this volume is to empower the study of video game music through providing tools, techniques and concepts for understanding music in games. Like any kind of music, there is no single method of analysing game music, but in discussing the video game as a musically significant medium and exploring the ways that the music can be appreciated, we can begin to make this music available for investigation. It is very much my intention that the critical observations and analyses in this book are not ends in themselves, but rather, that they act as prompts and precedents that can be replicated, emulated, criticized and refined to develop the

Shorter individual articles and chapters have also contributed to the discussion. See, for example, essays in K.J. Donnelly, William Gibbons and Neil Lerner (eds.), *Video Game Music: Studying Play* (New York and London: Routledge, 2014), Karen Collins, Bill Kapralos and Holly Tessler (eds.), *The Oxford Handbook of Interactive Audio* (New York: Oxford University Press, 2014) and Peter Moormann (ed.), *Music and Games: Perspectives on a Popular Alliance* (Wiesbaden: Springer, 2013), as well as influential articles like Isabella van Elferen, '¡Un Forastero! Issues of Virtuality and Diegesis in Videogame Music', *Music and the Moving Image*, 4/2 (2011), 30–39 and William Gibbons, 'Blip, Bloop, Bach? Some Uses of Classical Music on the Nintendo Entertainment System', *Music and the Moving Image*, 2/1 (2009), 50–52.

discourse about game music further. This book, then, is a toolkit and a starting point for a continuing project of understanding game music.

It is important that I am clear about my own disciplinary bias – my background is in musicology and so it comes as no surprise that much of the discussion within this book takes on the flavour of musicological discourse. I recognize that the art music material for which most of these concepts were devised is very different from the music to which they are applied here (an issue discussed further in Chapter 2). The rich disciplinary tradition of musicology has much to offer game music: the varied apparatus and theoretical resources that musicology has cultivated can be applied to game music with rewarding results – that is to say, they produce insights that I find to be useful, enlightening and valid.

This book is ambitious in discussing a wide range of games – from puzzle games to first-person shooters and from strategy games to management games. Not only do the types of gameplay considered here vary significantly, but the book covers a broad historical range: I examine games from the earliest periods of game music in the 1970s to games created during the second decade of the twenty-first century. This diversity reflects the broad landscape of games and the playful nature of its interrogation, where ideas and methods for understanding game music may operate over the entire domain represented by this media music.

Throughout the book I highlight music's contribution to games – music is not a redundant echo of other aspects of the game, but is a central part of the audio-visual experience of interacting with video game. This undercurrent was made explicit in 'The Ultimate Combo' through the multifaceted notion of 'playing' that the cartoon presented: as the music and gameplay come together in games, these simultaneous synchronous domains of play converge to create a complex nexus. Huizinga notes,

> It is quite natural that we should tend to conceive music as lying within the sphere of play...[since it] bears at the outset all the formal characteristics of play... [music] transports audience and performers alike out of 'ordinary' life into a sphere of gladness... In other words, it 'enchants' and 'enraptures' them...[7]

But we are here concerned with an even more integrated understanding of play. Beyond music being playful in itself,[8] multifaceted relationships are

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[7] Huizinga, *Homo Ludens*: 42.

[8] Huizinga claims that 'music never leaves the play-sphere'. Huizinga, *Homo Ludens*: 158. Huizinga seems to conceive of music existing within the domain of play, but that play also encompasses that beyond music. He writes: 'In itself, it would be perfectly understandable, therefore, to comprise all music under the heading of play. Yet we know that play is something

formed between the music and the playing of the video games. One informs the other, whether or not we have a candelabrum to hand.

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This book is split into two parts. The first, 'Analysing Video Game Music', consists of two chapters that consider the practicalities of discussing the music of video games. Chapter 1 focuses on the video game as a musical source. In this chapter, we will explore the musical components of a typical game and how these fit together. The chapter then considers the rather more conceptually thorny issue of the textuality of the game as a musical source. I suggest that by embracing the subjective and human involvement in the play of games, we can make peace with some of the difficulties that the game presents us and that this lesson is also valuable for art music scholarship. Chapter 2 deals with the activity of analysing game music, outlining a range of methods for engaging with the music. Alongside rather more traditional analytic techniques, the chapter shows how progam code and satellite sources (such as production documents) are useful when investigating game music. Together these two chapters provide an understanding of the materials under discussion and the ways in which the identified subject of study may be interrogated and represented.

While the first part of the book deals with exploring the musical content of games and how it can be investigated, the second part (Chapters 3 to 7) is instead concerned with researching the roles, functions and effects of music in games. It does this by developing critical perspectives on video game music. In the process, these chapters build up a 'critical toolkit' of ideas and investigative questions for understanding video game music. Each chapter's main conceptual ideas are summarized at the end of the chapter in question.

The chapters of Part II are organized around particular themes in game music and use the investigative techniques outlined in the first part of the book. Chapter 3 explores music and immersion in games, creating the idea of musical 'texturing' to refer to the ways in which music extrapolates beyond the visual aspects of games. Musical 'texturing' is further developed in reference to an epic construct (using *Wolfenstein 3D* (1992) and *GoldenEye 007* (1997)) and used as a way into understanding music and perception in games – how music expands the limits of human perception in

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different, standing on its own.' (42). Huizinga ultimately seeks to rehabilitate the explicitly playful aspects of music (especially musical performance) into the general conception of music (167–68). We will examine the literature on play more extensively in the epilogue.

a game construct. Chapter 4 deals with the creation of virtual worlds, particularly music's role in articulating realism and how it negotiates the relationship between the concrete 'real world' and virtual universes of a game. To illustrate this investigation, I use examples of racing games across the spectrum of realism: from simulation-style games like *F-1 World Grand Prix* (1998) to arcade racing games like *Daytona USA* (1994). The end of the chapter uses sports games to broaden the discussion further. As well as music being part of the construction of a virtual world, game music may also impact upon the universe outside the game. Chapter 5 is an exploration of communication and music. I examine the way that the musical score conveys gameplay-relevant information to gamers. Some games use music as a kind of strategist or coach to advise the player (as in *Bejeweled* (2001)), while in horror games like *Silent Hill* (1999) and *Dead Space* (2008), musical communication is part of the way that the games manipulate players in the cause of horror thrills. As players are taught how to listen to music, complex power relationships may be developed. In a case study of *Tom Clancy's Splinter Cell* (2002), I suggest that music in games can be understood as a performative agency that has distinct effects upon the players. Chapter 6, on Hollywood film music and game music, places a traditional film scoring paradigm in dialogue with game music practice to highlight both the similarities and divergences between the two media. In this chapter, as well as examining the reception of the music in *Advent Rising* (2005), I pick up the thread of music and communication to describe how the musical-narrative processes from Hollywood scoring are carefully adapted for games such as *Final Fantasy VII* (1997). Building upon arguments from Chapter 3, I make a polemic claim that music in games (particularly early games) routinely has a greater aesthetic priority, narrative agency and informational content in games than in film. Chapter 7 makes explicit a recurring theme of the preceding chapters – music and playfulness. By investigating straight-forward examples of games in which musical instruments are played by avatars (such as *The Legend of Zelda: Ocarina of Time* (1998)) and 'music games' such as *Guitar Hero*, I show how game players and music players may become one and the same. Music play through game play does not require an instrument to be shown – in the *SSX* snowboarding games (2001, 2003), players use their agency to alter the musical output in real time. I explore this aesthetic effect of music dynamizing the gameplay and game-play dynamizing the music. Finally, through an examination of the playfully interactive score of *Super Mario Galaxy* (2007), I show how responsive musical scores emphasize the performative dimension of the game and highlight the musicality of the video game itself. The critical perspectives

developed throughout the second part of the book are supported by an appendix, based upon Royal S. Brown's guide to analysing film music, which provides a framework for investigating game music.

The final pages of the volume form an epilogue that develops an idea of 'playful negotiation' to refer to the way that game music reveals the playfulness of the human-music interaction more generally. Music has the power to create domains of meaning, which are 'playful' because of the flexibility of interpretation. The word 'play' is not only applicable to the game context, but conjures images of an improvisatory, explorative, investigative and dynamic negotiation. By investigating 'play' and 'fun', I suggest that a shared sense of fun is part of what connects gaming and engaging with music, and furthermore, that music has the potential to increase the fun of video games through the combination of the two playful activities. As we explore, we remember that we also enjoy and play, which might just be the fundamental component of music itself.