

# Soundwalking in Games

Milena Droumeva  
Simon Fraser University  
mvdroume@sfu.ca

## ABSTRACT

*This paper describes a practice of soundwalking in video games as a form of virtual place-making and as a method for examining how sound design in games constructs particular values, realities, and attitudes to listening. Several case studies are discussed including Fortnite, Last of Us, Horizon Zero Dawn, and Season.*

## 1. INTRODUCTION

*The first time I thought about soundwalking as something that can be done in games was in relation to - of all things - Grand Theft Auto (GTA). Yes, the infamous game about stealing cars and beating up bystanders. I was watching someone's gameplay and commentary on YouTube, looking for tips on getting through a challenging section in GTA: Liberty City. As an open world role-playing game (RPG), GTA has an unusually responsive and detailed autonomous design (meaning that non-player characters and non-story locations in the game exist independently of the player). The game itself involves a lot of walking around familiar urban centres - Vegas, New York, LA. In the video I was watching the player was taking a detour into Central Park with the commentary: "I like to come in here sometimes and just stay in the park, listen to the birds, enjoy nature." As someone trained in acoustic ecology my immediate reaction then was, "What a strange thing to say!" You don't go into games to experience nature - playing games is avoiding nature, it's virtual escapism! But this moment also stayed with me because it was mentioned as nothing special. Just a by-the-way commentary that might resonate with others. This is the first time I realized how many players already soundwalk in games - they might not think of it in those terms, but they engage in non-mission exploration in open-world gamespaces.*

## 2. SOUND IN GAMES

As far as gameplay, this practice falls a bit through the cracks. Experiencing a virtual environment in open world games is neither story-driven nor play-pleasure but something in between. Often players won't talk about it because gaming and streaming culture is all about achievement, speed, and mastery. But with increasingly complex graphics and sound design played on better hardware ambient experiences are much closer to a "real" expedition outside than they used to be a decade ago. And perhaps we should consider the accessibility barriers to go-

ing out in nature: not everyone has a park or forest nearby, and not everyone feels safe in natural environments. Why shouldn't we soundwalk in games? Also, how can we better soundwalk in games? What might soundwalking in games offer to game studies research? Soundwalking is a performative method that relies on real-time presence and intentional movement through either physical or virtual space. Using creative soundwalking, one can engage in civic and cultural place-making or explore political and environmental issues [1]. This method draws inspiration from traditional ethnographic methods of walking as a means of inquiry in various qualitative contexts. Soundwalking extends the concept of the "flâneur" as an agent with creative authorship over public space [2]. In the physical world, this idea emphasizes how our attention and presence shape our environment. In virtual space, the flâneur might subvert the intended narrative by paying attention to sound thus creating new bio-political objectives rooted in the multimodal geography of gamespace, and *not* in the win-condition of the game.

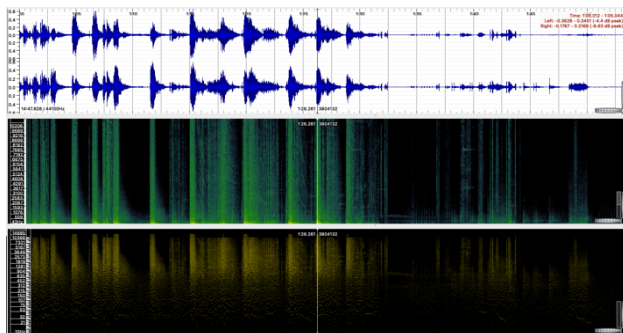
Unlike a fixed-time media object such as film or even a soundscape composition, a game's soundscape is a programmatic compilation of gamer actions and advancing narrative [3]. In a sense unique to each player, but also limited to the possibilities built into the game's database, the experience is more like an interactive art exhibit than watching a film. Sounds are called up as the player interacts with environments and game objects - but *only* those objects that have importance to the game's objective. The landscape in modern role-playing games is always far richer than the avatar can ever interact with. The soundscape in fact provides the stitching and bridging of immersion in between allowable actions [4]. Sound design in games is not always driven by authentic representation or even authenticity in terms of realistic sound behavior. To do so will detract from the gameplay's more pragmatic functions connected to the game's objective. As a result, even rich-world RPG games utilize what Lastra [5] would call "telephonic" rather than perceptual fidelity: a kind of verisimilitude based in typological soundscapes and evocative soundmarks that exist to symbolically mark space. The idea of soundwalking as a *method* of game research first emerged when a grad student came to me with an idea - using soundwalking in *Fortnite* to explore the militarization of pleasure from an embodied, affective perspective. Digital game ethnographies tend to focus on representation, narrative and game mechanics, as well as complex forms of sociality. But what of the individual

experience of place? How does game sound design and mixing construct a particular atmosphere, and reflect specific politics? How would soundwalking, similarly to practices in acoustic ecology, allow us to open our ears to different registers of gaming experience?

### 3. SONIC REPRESENTATION IN GAMES

#### 3.1 Values in Sound Design

*Fortnite* is a perennial fabrication and battle multiplayer online game. Geographical settings feature standardized biomes: oceanside, cityscape, forest, mountain, etc. By comparing the mixing and layering choices in *Fortnite* to an "authentic" sonic representation our aim was to uncover hidden values in the game's audio-visual world and understand how its design constructs the militarization of pleasure. In a highly artificial story world, possible sounds, events, and ambiances are predetermined for the player while unimportant sounds simply *do not exist*. For instance, we can find the glorification of gunfire in the very amplitude disparity between environmental sounds and combat sound effects (see Fig 1). The environment, furthermore, is not filled in but merely suggested by way of key symbolic sound effects. In an oceanside biome we have a frog chorus meant to signify waterscape, even though frogs are found by lakes and marshlands, not by saltwater.



**Figure 1.** Waveform and Spectrogram display of a section of *Fortnite*: the "loudest" and most prominent sounds pictured are gunfire (image generated using Sonic Visualiser).

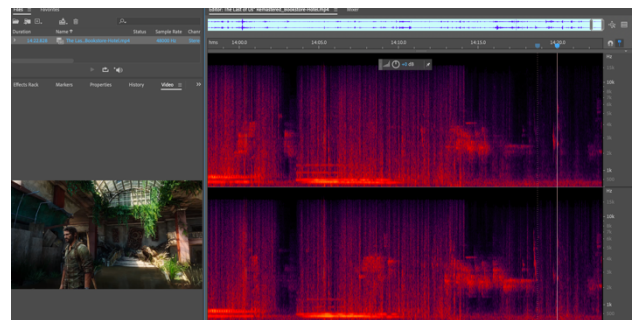
Contrast that with the lush environments of many single-player console RPGs: everything from weather to the sound of particular foliage and animals in different geographic areas is complex, alive, shifting: there are no loops and cheap tricks. The sound designer of a recent console game – *Horizon Zero Dawn* – actually travelled to the Amazon to collect a database of thousands of bird calls. Detailed foley marks each game movement and interaction, even if combat sound effects are still emphasized sonically. When we think of authenticity through sonic representation, games offer yet another catch: they are often set in fictional or fantasy worlds rather than documentary accounts of real places. In the case of both *Horizon* and *Fortnite*, the story is set in a post-apocalypse

future world. This marks them as part of a popular media trend centered on climate fiction and dystopian (human) futures.

#### 3.2 Necropastoral Sound

Post-apocalypse games offer a fascinating sandbox of ideas for representation, gameplay, character traits, and sound environment. What would extinction sound like? *Horizon* certainly falls in what Cat Goodfellow [6] describes as 'necropastoral' aesthetics: lush greenery, lush sound environment; most of humanity has fractured into tribal societies. In the sequel of the game the "Forbidden West" lies in today's North American Pacific Coast stretching from a sunken underwater Vegas, to abandoned skyscrapers in California. *Fortnite's* aesthetic, conversely, can be described as candy wrapper in sonic form: a perky fun surface without any depth. The light music and satisfying melodic sound effects do well to bring in kids as young as six to mow each other down with machine guns.

Necropastoral would also describe the aesthetic of *Last of Us* - a survival story saga of two unlikely partners - freelancer Joel and teenager Ellie. In *Last of Us* realistic natural ambiances hide dangerous signs of infected - what might be a bird chirp can also be the echolocation clicking of a grotesque enemy hiding in the quiet solitude of decayed but recognizable cities. One must listen here very attentively - not to enjoy - to survive. Enjoyment is a precious and short-lived commodity. Moments of visual or auditory pleasure are hidden like gems in the game's narrative. In one instance, Ellie and Joel arrive in a half-submerged hotel lobby looking for a way through Seattle's remnants. There we find that the lobby has become home to many tropical birds - former pets as well as wild species. The sunny dome ceiling of the hotel suddenly feels like a conservatory (see Fig 2). Luckily, no infected are hiding here.

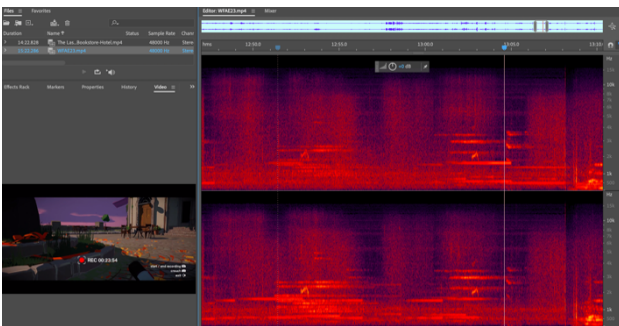


**Figure 2.** Sonic details of bird chorus captured during *Last of Us* gameplay (image generated using Adobe Audition).

There is a sadness and whimsy hanging in the ambience as Ellie - a child of quarantine zone living - discovers Joel's world before the infection. Soundwalking here is possible but never without risk: what does it mean to listen while surviving?

## 4. SOUNDWALKING EXTINCTION

Matthew Leggatt [7] talks about nostalgia in post-apocalyptic fiction as a “melancholic sublime.” We find this sensibility in many iconic titles from *Bioshock*, to *Fallout*, to small indie games. One such example is *Season*, released January of 2023. The game offers guided exploration and a capturing mechanic towards a scrapbook of journalistic impressions. Cryptic yet peaceful, the game not so subtly alludes to climate change as a global extinction event, and one that has happened before. The aim of the main character - a young teen from a small village - is not to stop the impending cataclysm but document the last days before it. She sets off armed with a camera, recorder, backpack, and a blank journal, and fills in the sights and sounds as she goes along. The warm animation is reminiscent of 1990s children’s stories like *Ruxpin Bear* and Studio Ghibli art style. There is a mysterious history to the origin world and our hero is tasked to uncover it. There are no enemies in the valley and soundwalking is quite peaceful. Field recording is an added mechanic to soundwalking and I think the first of its kind in a game. As a soundscape researcher my first question was, could I record anything as I would in the real world, or will there be only a selection of predetermined objects to record? Indeed, some objects of interest are meant to be recorded: a water basin, field radio set, a song, crackling fire come to life when my avatar hits “Record.” The sounds of these objects intensifies as soon as I turn on the recorder, just the same way as a microphone would instantly amplify small sounds in a real field recording session. The most interesting object in the game is a “memory flower” - silent to the eyes, but when captured with the recorder it reveals voices and conversations, echoing from within the flower itself.



**Figure 3.** Sonic details from a recording session in *Season*: rich ambience with music drones and the occasional bird call (using Adobe Audition).

When I try to record something more insignificant that draws my interest in the environment, however, the limitations of the sound design are felt; I cannot capture small insect sounds as I crouch down in the grass; the same bird call circulates again and again even if I stand longer in the forest with the recorder on. Small splashes don’t change when I approach a lake shore as they should.

## 4.1 Final words

Eco-aesthetics abound in *Season*. Some of the interactions are warm nostalgia - helping a woman and her son pack for evacuation; riding my bike in a lush fruit orchard. But some encounters carry the tension of violent pasts: an old parking lot holds rows of frozen soldiers set under a sleeping prayer. Strange memorials and statues of past gods fill in the rich history of place and people. Soundwalking here is memory walking with an investigative flair. As a climate grief game *Season* embodies the melancholic sublime - with its warm but suspenseful soundscape, quiet introspective narration, and sonic delights weaved throughout the emerging story. This is the first game that inspired me to actually go outside and create a (digital) scrapbook of sounds, pictures and objects. The message of *Season* is simple: you cannot prevent the ending of an era but what do you want to preserve and how will you tell its story? By giving you, the player, curating options, it drums home the message that capturing is subjective and the journalist is not an objective bystander but an active architect of meaning. Soundwalking in gamespace is an expansive activity that can range from aesthetic enjoyment to digital ethnography. I’m less interested in romanticizing it as a de facto ‘subversive’ player action. Instead, I look to its affordances and limitations to direct listening to place: could it be part of the soundscape researcher’s toolbox? Can it elicit new and richer connections between player and soundscape?

## 5. REFERENCES

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