



Audiogames and Accessibility

Lesson Plan: Audiogames and Accessibility

Created by: Andrew Campana, Cornell University

Creation date: December 19, 2023

Keywords: Video Games, Audiogames, Accessibility, Blindness, Media, Digital

Audiogames and Accessibility

Target Audience:

Undergraduate students

Duration:

1 or 2 classes of 60 minutes

Learning Objectives:

This is a lesson plan centered around two things: audiogames and the idea of "accessibility."

The main case study here is the medium of "audiogames"—in other words, digital games in which visual elements are optional or non-existent, and one can play through sound alone. This takes the "video" out of "video games." These have historically been designed by and for blind and low vision players, while sometimes they are designed to be accessible for

blind and sighted players alike. Relevant to our purposes, an enormous number of the most popular audiogames were developed in Japan, and are played by blind and low vision gaming communities across the globe.

The other main idea is "accessibility." Students will be asked to play an audiogame and pay careful attention to their experience of such—the vast majority of them will never have played one before. This experience will be a useful springboard into thinking about "accessibility," and all of that term's complexity. What is accessibility? Accessible to whom? Who determines what "access" entails? What other terms and concepts is "accessibility" often conflated with? Why might the accessibility model itself elide or distort when it comes to disability rights and disability justice? Are there alternative models to "access"? How might we think about a game designed from the ground up so that a variety of bodies can play it, rather than having certain ones given "access" to it and others serving as the "norm"?

Potential Courses to Include this Lesson in:

- Courses on video games and/or interactive media
- Courses on music, audio, and sound studies
- Courses on Japanese pop culture
- Courses on digital media

Required Materials:

It is recommended that the students play (ideally in advance of the class) at least one example of an audiogame. It doesn't really matter which game, as long as students gain firsthand experience with the medium (or at the very least watch/listen to some footage from an audiogame). Some suggestions:

- Those with Japanese language knowledge should ideally play [ShadowRine](#) (2017) if possible (free but requires a PC computer), or [any](#)

other game by Galaxy Labo.

- The Vale (2021, PC or Xbox)
 - Or students can listen to a sample of its gameplay here—wear headphones!
- A Blind Legend (2016, on itch.io for the PC, or for free on ios or Android phones)
- Other audiogames on itch.io (some playable on Mac, PC, and/or in your browser)
- The browser-playable (and free) results of the BlindJam audiogame "game jam" (i.e. a short-term game creation contest)

Students should also watch this video introduction to ShadowRine, the game discussed in the final section of the first suggested reading below.

A rough translation of the Japanese narration in the video:

"ShadowRine is a touchable action RPG. While you progress on the map and take down enemies, the story progresses as well. There are three playstyles: Regular Play, Touch-Sense play, and Sound Play.

- In Regular Play mode, you play while watching the screen.
- In Touch-Sense play mode, the player, enemies, items, and obstacles such as walls are displayed on a tactile screen, which can be felt by your fingertips while you play. In player display mode, only the character is displayed on the tactile screen (and not enemies, items, or obstacles), so you can confirm the location of your character; in monster mode, only enemies are displayed (and not players, items, or obstacles), to confirm their location as you fight them; in item display mode, players, enemies, and obstacles are not displayed.
- In Sound Play mode, the locations of players, enemies, items

and so on are indicated by sound, and a screen reader reads any text within the game aloud. You can hear the sound of wind as you approach corners in the map where you must turn. Left/right distance and object location is indicated by volume and panning from L to R. Up/down distance is indicated by pitch interval going higher or lower.

- Field viewer—when you are unable to find the path forward, the "field viewer" function (that plays different sounds indicating what is around you in each direction) can be useful.
- There are many more accessibility considerations, inventions, character changes, unique skills, a voluminous plot—ShadowRine is an action RPG overloaded with points of interest. Please have your fill of the world of Careshia!"

Potential Readings:

Andrew Campana, "Beyond Status Effects: Disability and Japanese Role-Playing Games," in *Japanese Role-Playing Games: Genre, Representation, and Liminality in the JRPG*, edited by Rachael Hutchinson and Jérémie Pelletier-Gagnon (Lexington Books: 2022).

- This is a chapter I wrote meant to serve as an introduction to disability and the game medium in general and audiogames in particular. In the first part, I consider the "role-playing game" genre and how it often reflects structurally what Yokota Hiroshi called "eugenicist ideology" (*yūsei shisō*); in the second part, I use the game *Chrono Trigger* as a way into thinking about representation, and what it means to have "disabled characters" in a game; finally, the third section is about Japanese audiogames, particularly the innovative game *ShadowRine*.

Rachael Hutchinson, "Empathy for the Blind: Negotiating Disability in Final

Fantasy XV," in *Japanese Role-Playing Games: Genre, Representation, and Liminality in the JRPG*, edited by Rachael Hutchinson and Jérémie Pelletier-Gagnon (Lexington Books: 2022).

- From the same collection as above, this chapter explores the representation of blindness in a massively popular video game, and the fraught question of whether or not games can or should produce “empathy” for disabled people.

Andrew Campana, "[The Neglected History of Videogames for the Blind](#)," *Killscreen*, September 26, 2016.

- This is a short article I wrote for a general audience, looking a bit into the history of audiogames (especially in Japan) and the biases of the medium (and discourses about it) towards vision alone.

Sergio Nesteriuk, "[Audiogames: Accessibility and Inclusion in Digital Entertainment](#)," *Digital Human Modeling 2018*, pp. 338-352.
https://doi.org/10.1007/978-3-319-91397-1_28

- This is a solid, easy-to-read introduction to audiogames, from the particular perspective of game design.

Paul Roquet, “Acoustics of the One-Person Space,” in *The Immersive Enclosure: Virtual Reality in Japan* (Columbia University Press, 2022).

- While not explicitly about audiogames or blindness, this is an important media studies chapter about the sonic elements of virtual reality experiments in a Japanese media historical context that has much resonance with the issues at hand.

Stephanie Boluk and Patrick LeMieux, "[Blind Spots: The Phantom Pain, The Helen Keller Simulator, and Blindrunning](#)," in *Metagaming: Playing, Competing, Spectating, Cheating, Trading, Making, and Breaking*

Videogames (University of Minnesota Press, 2017)

- A chapter on a variety of approaches to thinking about "blindness" in relation to games and game challenges, some more problematic than others.

Discussion Questions:

1. Share your personal experience of playing the audiogame you chose before class. What was it like? Did the experience surprise you? Was it easy or difficult? If you are sighted, were you looking somewhere while playing, or did you close your eyes? How long did it take you to "get the hang" of it, or did that never happen?
2. What do you focus on when playing an audiogame, as compared to a videogame?
3. There have been some strenuous debates about "accessibility" in various gaming communities; why do you think this might be? What are some competing idea(l)s about accessibility in relation to games? What's the difference between accessibility and difficulty?
4. What are some potential issues with how "accessibility" is usually conceived of? Why might the concept itself be problematic from the perspective of some disabled people?
5. What stood out to you about the *ShadowRine* trailer/explanation? What is the creators' approach towards accessibility? Who is their intended audience?
6. Why do you think sound and audio have historically been considered less important to audiovisual media like videogames, films, and television? What biases might these reveal?
7. Historically, many audiogames that have been popular with sighted audiences have been horror games, where being blind is a source of fear or tension. How do the Japanese audiogames explored here differ from that model? How do they compare with other Japanese video games you know?

Activities:

Game Accessibility Group Exercise

In this exercise, students are split into groups, and each group watches a short video of a classic video game. Each group must come up with ideas about how they would redesign the game/create a new version of the game to make it accessible to a variety of players, or alternatively, state what aspects of them "happen to be" accessible for certain players already. They can do this just via discussion, or by writing things on paper, a laptop, a blackboard, or (what I used) a collaborative Google Doc.

Classic game video clips: [Super Mario Bros.](#), [Tetris](#), [Pokémon Snap](#), [Mario Kart 64](#) (or any other game you think might work)

It might be most efficient if each group member (or a pair of them) focuses on a different category of player, for example:

- Deaf and hard of hearing players
- Blind and low-vision players/colorblind players
- Players with motor disabilities (e.g. use of only one hand, shaking hands, slower reflexes, arthritis, tendonitis, repetitive stress injuries)
- Players with cognitive disabilities and/or a form of neurodiversity (e.g. photo-sensitive epilepsy, autism, ADD, dyslexia, other memory or processing issues)
- Players who can't read/can't read English
- Any other category you can think of!

The [Game Accessibility Guidelines](#) website might be very helpful if they're stuck, but it's okay to just use their intuition and base knowledge for the sake of this exercise.

Relevant Vocabulary:

[Here](#) is a great general guide for best practices in disability-related

language by the Center for Disability Rights.