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Research in Context ADAD5003

Creative Computer Games Design (BA)

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Essay Question4

From the SOUND & MOVING IMAGE research strand lectures, choose a theme, movement, or selection of artists or designers that relate to your practice or interests and construct a 2500 word essay. Consider primary themes, key writers and relevant practitioners.

Wordcount: 2283

Using the soundscape in a horror game to generate fear and anxiety.

Sound is a key element in Games Design due to how it aids in contextualising and providing clues towards the game world. This, in turn, influences how the player interacts with the game. Because of this, "Sound in computer games should be approached directly in regard to its purpose within gameplay" (Grimshaw, 2011). In the case of the Horror Genre, the sound is "Designed to keep the player in a state of fear and anxiety throughout the game" (Abdel-Meduid, 2009). Sounds can be designed to achieve this through the precise use of volume, timing, as well as the context the sound is played in. Developing these concepts well within a soundscape can cause the effects of each to amplify the effects of the next, ensuring the player reacts in the desired manner. Therefore, the goal of the designer is to ensure that the use of sound caters well to the gaming experience. As "The Gamer responds to events that were programmed by a designer" (Grimshaw, 2011).

To this effect, Games like "Outlast" (2013) utilize the soundscape to their advantage. An example of this can be observed during the objective "You need your camcorder to navigate the darkness." On trying to reach the third floor to escape the asylum, the player jumps over a gaping hole in the floor to reach a doorway. However, the platform they land on gives way beneath them. The player's camcorder falls through the hole, into a gap in the floor below. The player cannot move forward as they are unable to see into the darkness ahead of them without the camcorder, so they must undertake a quest to retrieve it.



Music is used both within this cutscene and shortly after it ends to tell the player the emotional state of the character. The harsh dissonant screech of a violin occurs at the very beginning of the cutscene; indicating the character, and thus the player's shock and fear towards the situation. As the scene progresses, and the camcorder is lost, the music fades away. This has a twofold purpose. The first is that the music fading away as the camcorder is lost emphasises the loss the player character initially feels. The second purpose is to allow for the sound of the real danger facing the player — the breaking wood — to be pushed to the forefront of the soundscape. Once the danger has passed, the music returns. However, its tune is less dissonant and more

melancholy. Using sound in this way establishes the importance of the camcorder to the player. It functions as a lifeline to the character, not only documenting the experiences they have faced within the asylum but also providing the key ability to see in the dark. Without the camcorder, the hallways are too dark to navigate, and the character's hopelessness towards being able to leave the asylum is firmly established.

Volume and timing remain two key features in any horror game's soundtrack. Collectively they can play a key role in how a sound can be interpreted to provide fear and anxiety. "the best method for causing fear is high-volume, well-timed, and sourced sound effects. For anxiety, the best method is medium-volume, untimed, and unsourced sound effects." (Abdel-Meguid, 2009).

There are many key moments within "Outlast" which utilize high-volume, well-timed, sourced sound effects to generate fear. Within "You need your camcorder to navigate the darkness" (Outlast 2013) alone, there are three such moments. The first, as mentioned previously, was the harsh screech of music as the floor beneath the player gave away. The second was a "jump scare", a sudden event in which something jumps out at the player to scare them. This event occurs as the player searches for their lost camcorder and is unable to see in the darkness. The third moment is shortly after the camcorder is retrieved, and the player turns, using the camcorder, to see a horde of inmates who quickly give chase. The sudden jolt of the music amplifies the jolt of fear the player already experiences by witnessing the event.



Despite the effectiveness of these moments; well-timed, high-volume moments should not be the only sounds used within a horror game. While high volume sounds are effective at producing fear, and fear is the key emotion trying to be invoked, this fear is generated through shock value. If all the sounds within a piece of media are therefore at a high volume or the player is not given time to breathe before the next event the player grows used to the noise and the shock value is negated. "While loud and noisome its homogeneity in the form of being loud and noisome, which makes it hard to absorb what is going on" (Ellis, 2017).

An excellent example of homogeneity in the use of loud sounds can be seen within the monster encounters throughout the game "Blair Witch", released in 2019. While the first jump scare in each encounter is somewhat effective, because of the sudden transition from quiet to loud, the remainder of the encounter is far less frightening to the player. One reason for this is in the soundscape is due to how the music remains loud within

the encounter. Because of this, subsequent moments of raised volume in the sequence are far less shocking and become somewhat mundane.

"Outlast" however, contrasts its use of high-volume, well-timed events. Like in "Blair Witch" (2019), the game does use these sudden events to try and invoke fear in the player. However, the sound design within the game focuses on amplifying these events where possible. In some instances, there will be a subtle reduction in noise to near-silence moments before the jump scare occurs. This allows for a more startling contrast in the noise level between the low-anxiety state and the fear state, emphasising the event to the player.



Following on from the sudden jolt of fear this produces, there are two ways the encounter could continue. If the encounter is a brief event, the music will slowly quieten down afterwards as if to mimic the player's uneasiness surrounding the event. This allows the player time to breathe and relax their guard for a little. By allocating time to recover, the next event can be made just as impactful as all those that came before it.

Longer encounters, such as chase sequences, cause the music to remain loud for as long as the player is in danger. This indicates to the player that they need to keep moving to escape whatever is behind them. Using a dissonant but fast-paced piece of music here sets the tone for the event and reminds the player that they need to be quick and decisive. Once the player escapes the danger, the music then quickly quietens down.

The vast majority of "Outlast"'s soundscape focuses on its ambient sounds. These not only provide the "medium-volume, untimed, and unsourced sound effects" that Abdel-Meguid's thesis state best produce anxiety, but also incorporate sourced sounds that are key to heightening the player's anxiety further.

There are two clear periods within "You need your camcorder to navigate the darkness" (Outlast, 2013) in which ambient sounds remain the primary source of sound in the soundscape. The first is after the camcorder is lost, and the player begins the mini-quest to retrieve it. All of the key sounds in this part of the game are sourced ambient sounds. From the characters' footsteps, to the rain, to the sound of water gushing out of burst pipes. The occasional clash of thunder is used to contrast the quiet nature of this soundscape and provide a

few moments of fear and anxiety within the player. However, the key element to this is not the ambients alone, but how the player's character appears to react to them.

Initially, within the game, the main character's breathing only occurs during the few moments where the player is hiding from something out to kill them. The surrounding soundscape appears to fade away, and it becomes the key focus of the audio. As the game progresses, the sound of the character's breathing becomes more commonplace, appearing during moments they are startled, terrified or anxious about the events surrounding them. The breathing itself sounds very naturalistic, as it can hitch, startle and grow ragged depending on the cause. On occasion, the sound of the character's pounding heartbeat joins the audio mix. Together these key signals indicate to the player just how terrified the character they're controlling is. By incorporating these elements into the sound design the designer has ensured the player understands exactly how the events the character has gone through is impacting him, generating a sympathetic fear response. The player feels what the character feels which amplifies their own emotions surrounding the gameplay events.



The second section within "You need your camcorder to navigate the darkness" (Outlast, 2013) which focuses on ambient sounds is after the use of a jump scare. The ambient soundscape here is marginally different from the one before as new sounds such as the far away banging of pipes and the sound of something moving through an air duct are also added. Both of which cause the character and the player to question whether something or someone is nearby following them, planning an attack or cutting off an escape route. These sounds are not sourced sounds for a valid reason. "Anxiety is usually caused by the uncertainty towards an enigmatic or unspecific threat" (Vachiratamporn, Legaspi, Moriyama and Numao, 2013). By the player not being certain to the cause of these sounds, or where they come from, they heighten the sense of danger that the player feels surrounding them. This paranoia generates anxiety, which further feeds into the terror they experience.

The context in which a sound is heard is of considerable importance to how a sound can be interpreted and understood. For instance within a performance "The sound of clapping can be heard as a mere annoyance interrupting a multi-movement musical work that has not yet been completed; a social gaffe. But on discovering it is the applause of a world-class conductor who simply cannot restrain himself after a magnificent performance by his own orchestra, the sound takes on a new significance" (Ashley, 2010). In the example, Ashley gives, the sound goes from a rude interruption of a piece being performed to a joyful expression of praise, despite the sound itself being the same.

In a similar vein, deliberate use of context can amplify or change the effect that even a mundane sound, can have on the player within a game. “Teaching a player to expect a dangerous situation after a certain sound effect can teach the player to feel anxiety whenever that sound is played (Abdel-Meguid, 2009). So by priming the player to associate sounds, whether diegetic or non-diegetic, with something dangerous you “encourage “thinking” about the scariness or creepiness of the game” (Grimshaw, 2011). This can encourage uneasiness and anxiety later on within the game. Subconsciously the player will associate the sound with a bad event and so will physically prepare themselves to face the danger again whenever they hear it. If the danger does not appear, however, their anxiety has no focus to which it can resolve itself and so the uncertainty heightens the feeling of anxiety further. This could end up creating a feedback loop in which the feeling of anxiety is pushed higher and higher.

An example of this can be seen in “Outlast.” During the majority of the game, the non-diegetic music in “Outlast” is loud only when the player faces a sudden horrifying event, or during a scene where the player is running for their life. This conditions the player to associate the non-diegetic music with something dangerous. However, there are moments within the late game where the music may grow in volume once or twice without any clear danger being nearby. This ramps up the player’s anxiety as they anticipate an encounter that never materialises.

To conclude, the soundscape within a game is a key factor in generating an engaging and immersive experience for the player. Because of this, a thorough consideration of key elements in sound design is crucial in creating and amplifying the emotions the designer wants the player to experience. Designing for horror games is designing to produce fear. Therefore, all aspects of the sound design should cater to that.

Non-diegetic music can be used to strongly suggest the emotions a character in a game is feeling. When other emotional indicators, such as body language or facial expressions, are absent, this is an extremely powerful tool. Language is not often enough to convey emotion in a scene. So when vocals are not enough, the use of music becomes essential. The volume and timing of sounds are crucial in keeping the player in the appropriate emotional state. Moderating high-volume well-timed events with lower-volume random events allow them to contrast each other and ensure the player is able to go through the desired cycle of fear and anxiety. The use of context also aids in this through priming the player’s expectations. As a designer, once you understand what noise will be signalling to the player, you can then use it to amplify the players experience further within the game world.

When balanced carefully, these elements work in tandem to keep the player on edge throughout the entirety of the gaming experience. Overuse of one may lead the soundscape becoming predictable, negating its effectiveness and leading to the game being seen as ‘boring’ rather than engaging. “Outlast” works well due to the skillfully used variation in sounds and encounters the player faces and so remains an informative example into how sound should be developed for video games.

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