Chapter 32
Playing With Auditory Environments in Audio Games:
Snake 3D

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ABSTRACT

Audio games highlight audio as the major narrative, ludic, and interactive element in the process of gaming. These games enroll the players in the process of gaming and distribute agency by translating auditive cues into interactive "pings" and provide a potential for an auditory virtual space. Designed for either blind persons or as "learning software" for hard-of-hearing people, audio games dismiss graphical elements by using the auditory ludic elements and foreground auditory perception as a main condition for playing the game. Spöhrer demonstrates this by using the example of 3D Snake, which needs to be played with headphones or surround speakers. The game uses verbal instructions and different sound effects to produce an auditory image of a snake that can be moved with the computer keyboard. In this auditory environment, the relation of both human and non-human elements (e.g., controller devices, the arrangement of speakers, cultural practices of gaming, aesthetic devices, and software configurations) produce and translate a specific mode of auditory perception.

INTRODUCTION

Within those branches of Media Studies concerned with digital games, usually labelled *Game Studies*[1], the auditory dimensions of 'digital gaming' have only recently attracted the attention of the academic discourse: Only ten years ago, "articles on video game music [were] few and far between" (Munday, 2007, p. 51) within the upcoming field of *Game Studies* and merely a "niche" (Röber & Masuch, 2005, p. 1). Meanwhile, this situation has changed – at last a bit – with the publication of a range of articles and books on video game sound design, the theory and practice of game sound and music as well as their relation to narrative and gameplay (e.g. Munday, 2007; Collins, 2008; Collins, 2013; Austin, 2016;

Summers, 2016, Domsch, 2016). Despite such publications that point out to the crucial role that the auditory aspects play for digital games, it seems that in most of the research dealing with digital games, visual aesthetics is attributed the most important factor in digital gaming. Moreover, if one considers the common and widely accepted definitions of video or computer games, the visual element respectively graphics are a defining attribute or even a condition for 'playing the game'. See for example the following definition of 'video game':

By definition, the video game is a visual medium, and one that combines information processing and interaction, often in such a way that one relies on the speed of the other. A large part of playing a video game involves reading and interpreting the graphics of the game, for navigation and other goal-oriented activities such as collecting or using objects and interacting with the right characters, and so on. (Wolf, 2006, p. 193)

In this respect, the auditory aspects of gaming are frequently considered a 'supporting aesthetic device' or "decorative effects" (Gärdenfors, 2003, pp. 111) only and thus 'seeing' is more important than 'hearing' when it comes to handling the interface or interacting with the game, executing the ludic components as well as following the game's narrative – this might also be related to the recent studies on visual culture or even be considered a symptom of such (e.g. cf. Mirzoeff, 2001). It is true that "[c]urrently game interfaces mostly rely on graphics to convey information to the player" (Garcia & de Almeida Neris, 2013, p. 229). And although some of the most popular and recent 'mainstream' games sporadically implement ludic auditory sequences – such as the blind 'Clicker' creatures in *The Last of Us* (Naughty Dog, 2013), that react to sound only and thus shift the focus on auditory cues –, these games rely heavily on visuals ('graphics') in the interactive process established between the player and the gaming dispositive (cf. Waldrich, 2016): „Many of the game aspects, e.g. player-game interaction, scenery and scenario, guidelines, tutorials and others, are primarily communicated through colors, shapes, text and visual objects" (Drossos, 2014, np) and from a commercial perspective this "is probably due to both user and developer prejudice" (Friberg & Gärdenfors, 2004, p. 149). Thus in most commercially successful games the "audio communication channel appears to be under-utilized, even though it has been shown to be effective as an interface and as a means to entertain" (Drossos et al., 2015).

This argument seems strengthened by the fact that games, such as for example the *The Last of US,* are very hard to not at all to master without the visual information provided by the graphical interface, whereas the absence of sound does not have the same effect. Though weakening the aesthetic experience, most commercially successful games can be played without the presence of sound.

Nevertheless, it would be wrong or at least an incomplete statement to consider the graphical interface of digital games as a defining element of such[2], since there is a whole range of games, so-called 'Audio Games' or sometimes called 'audio only games', that highlight and implement 'audio' as the major narrative, ludic and interactive element and thus foreground auditory perception as a main condition for 'playing the game'.[3] Instead of creating a ludic space by use of a graphical interface, these games' gameplay, immersive quality and interactive situation are conditioned by what can be described as "auditory interfaces" (cf. Garcia & de Almeida Neris, 2013, p. 229). Dependent on the software, the sensory capacities and gaming skills of the players as well as the setup of the socio-technical environment of these games or the peripherals and devices (the 'hardware') that are used, such auditory interfaces can emerge in different forms and shapes or genres – and are not necessarily 'simply' interactive audio books. There are various different ways of generating "auditory objects" (e.g. characters, items or obstacles) and

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