Atmospheres at Play: Aesthetical Considerations of Game Music

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Every sound has its atmosphere. Besides shapes, colours and odours, it is sound that contributes fundamentally to the atmospheric impression of a given object or situation. Therefore music, as the ordered succession of sound, is, in addition to its structural qualities, a vehicle for the transportation of atmospheric values. There are, of course, many reasons why people listen to music, one of which is the desire to put oneself in a certain mood, perhaps the prevalent one. The fact that music has the ability to do so might be considered the master motivation for being used as a supporting means in art forms such as opera, film and video game. By the controlled application of music in genres of mixed media, the producer makes use of its power to evoke, strengthen or express affective content in a very direct way. Film directors and authors of games hire composers in order to capitalize on their capacity to render a framework of aural atmosphere to the product and to help complete the user's mood management. The intention of the following explanations is to give an account of the way computer games depend on musical atmospheres, and to reveal the aesthetic implications of such a perspective on the alliance of music and game.

1 Introduction: Homo Ludens

A human being is a player. Johan Huizinga's essay *Homo Ludens* (1939) shows that playing or gaming is an anthropological constant, and that culture is not only a result of playing activities, but evolves as play and in play (Huizinga 1987: 189). This refers to Friedrich Schiller's *Letters on the Aesthetic Education of Man*, in which the author claims the anthropological necessity of playing when he mentions that man only plays when, in the full meaning of the word, he is a man, and he is only completely a man when he plays (Schiller 1993: 618). Moreover Schiller opens up a specific aesthetic dimension by adding that man should *only play* with beauty and he should play *only with beauty*. These general determinants meet with more specified views of music. Huizinga himself, for example, places music between the areas of a noble game and the enjoyment of art. Long before him, Aristotle, in his *Politics*, stressed the usefulness of music as a relaxing and agreeable game, whose enjoyment

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heals the harm that comes from a stressful way of living (1339b15-40). The 19th century musical writer Eduard Hanslick drew a comparison between music as "sound and forms in motion (tönend bewegte Formen)" and the lines of an arabesque or the play of forms and colours in a kaleidoscope (Hanslick 1991: 32-33). He knew Immanuel Kant's *Critique of Judgement* (1790), in which the author synthesized the aspects of enjoyment and play with regard to music, uttering his creed that music does not lead to any knowledge, but merely to a feeling of pleasure by setting our sensations in play (B 211/A 208). Precisely because music is perceived in the mode of mere play without any ambitions to represent nature, truth or morals, it can address itself to man's sensitive, hence aesthetic, faculties more directly than any other form of art. It has the character of a play (of sounds and forms) of its own, which, in turn, causes a play of sensations, and it is this which makes it immediately accessible and effective. Music as a game does not aim to capture reality, but to produce its own specific form of virtual reality that is directly connected with the emotional, affective resources of man. The Kantian "As-if" (B 18/A 18), which means that art in general does not involve a realistic approach in terms of knowledge or morals, but instead a kind of playing mode (*as if* it was real) of man's faculties (B 28/A 28), relates both to the virtual reality in video games, and to music's highly virtual, game-like, and non-representational character. The thesis of *homo ludens* and the concept of music involving elements of play (not only in the trivial sense of somebody playing music) do not seem to be out of date. People keep on playing (which is obvious in the two fields of sports, on the one hand, and the constant success of computer games on the other). To my knowledge, there is no other art form that ties music and gaming activity as closely together as video games do. This might appear as a late, but plausible, consequence of Kant's aesthetic remarks. A video game soundtrack contributes essentially to setting our imaginative apparatus in motion, in play; and the whole game, which depends on that apparatus, becomes more credible and immersive, the more animating the music is. But what actually is a game?

Video games match Huizinga's formal definition of play, because they are (one) free actions, (two) are removed from ordinary life, but (three) have the power to absorb the player's attention completely, without (four) having any material use for him/her, are characterized by (five) a defined space and time, (six) determined rules, and (seven) the tendency to build a social network (Huizinga 1991: 22). What probably sets computer games apart from most other games is the degree of perfection by which they create a world of their own: a virtual world with a highly immersive character. Besides the visual elements and the process of identification of the player with the actions fulfilled on the screen, it is the use of music as an atmospheric vehicle that both supports immersion and helps the player to consider the game's virtuality a kind of reality, a reality that, like his/her real surroundings, is filled with sounds and music (Collins 2008: 34-37). It was therefore not due to

disinterest in music when Microsoft "insisted that music in every Xbox360 game should be replaceable with the user's own music files," (ibid: 127) but, on the contrary, it was this exact knowledge of the importance of music, coupled with the endless variations of individual taste, which created a positive response to the games. By connecting his/her beloved music to the console, the player would have the impression that the game corresponds to the music. The actions thus seem to be characterized atmospherically by his/her own choice of music, which, in turn, allows the player to identify with the former even more strongly than any pre-composed music could achieve.

2 Games and atmosphere

The close connection of computer games and atmosphere can be found in the fact that games have a very intense relation to space. "Space and the experience of space are a crucial motive of computer games. A game does not describe, it is experienced." (Lischka/Meißner 2003: 487)[1] Many games, such as, nomen est omen, *Computer Space* (1971), generate the image of a closed space of 360° which transgresses the simple two-dimensional platform on screen. In this case, the objects disappearing on one side of the screen reappear on the other. It suggests a space beyond the screen. The next step is to make this closed space an environment, i.e. the surroundings that offer qualities to effectively make the player believe he/she is a part of the game, or, vice versa, that the game is almost a part of his/her "real" life. Games thus aim for the creation of a spatial environment that is suitable for the dissolution of the confines of objective attributes (the landscapes, buildings, and other settings) as well as being suitable for subjective perceptions and sensations for the sake of immersion. The term "immersion", often used in this context, can be regarded as problematic, firstly because complete immersion, envisioned by several authors, remains a myth; secondly it implies a passiveness on the part of the player which is contradictory to the concept of gaming (Neitzel 2008: 96, 102). Therefore, "involvement" might be the better word (ibid.). An environment of involvement can be understood as an atmosphere. Gernot Böhme describes atmosphere as a "typical in-between phenomenon":

> "Atmospheres stand between subjects and objects: one can describe them as object-like emotions, which are randomly cast into a space. But one must at the same time describe them as subjective, insofar as they are nothing without a discerning Subject (sic). But their great value lies exactly in this inbetweeness." (Böhme 2000: 15)

[1] Translation G.H.

The atmosphere of a game is not so much a matter of structural devices (which are, of course, indispensable to its construction), but of the possibility to be felt, to be experienced as a presence, and as a bodily sensation of the player him/herself. It touches the player's physical and intellectual sense of self in a space. This kind of atmospheric self-awareness in gaming, which is challenged by opinions that gamers tend to lose themselves in the play, is a continuation of Schiller's dictum that human beings are completely human when they play. One should add that the status of self-perception is an "as-if," hence a purely aesthetic status. Böhme makes this a point when he claims a basic need for this "as-if", for aesthetics, which even touches the question of human dignity in every life, as it is a basic constitution of everything to appear (to have a virtual reality), not only to *be* in a certain way (Böhme 1995: 42). (The moralistic debate over gaming will probably turn out to be a matter of successful self-reliance, proportion and measure.)

While it is true that the player's sense of self seems to be a crucial point in virtually all computer games, genres like the First-Person-Shooter (FPS) and the Role-Playing-Game (RPG) depend heavily on the success of the atmospheric setting. In *Doom* (1993), the player sees and hears only what the avatar sees and hears. He looks through the eyes of the avatar as if he was him. The space is characterized by the colours, the light conditions, the movements of the avatar, and the sounds weapons and enemies produce. The joy of gaming is bound to the degree of plausibility in the dissolution of objective space and subjective perception, i.e. to the atmospheric impact of the virtual reality. The same can be said of *World of Warcraft* (2004), which invites the player to spend a massive amount of time in a Tolkien-inspired fantasy world, performing several adventurous tasks, above all killing other characters as well as monsters. It is unlikely that someone would accept this invitation in a flawed or ill-conceived atmospheric setting. There is an interaction between technical developments in graphics and audio involving the creator's imaginative resources, being seemingly without limits, an increasing perfection in the creation of game atmospheres, and the degree of involvement in the player's immersive cruise.

3 Musical atmosphere in games

One of Böhme's most challenging claims is that a main feature of music is to create atmosphere, and that this feature even defines musical reality. (Böhme 1995: 224) In the course of the twentieth century, music was no longer considered solely a time art, but also a space art. Blurring the boundaries between "high culture" and the soundtrack of everyday life, music increasingly incorporated all kinds of sounds, "street scenes, sounds of nature and the acoustic world of the factory" (Böhme 2000: 16) (the latter as part of the individual's working environment). Finally, "the technique of sampling makes any kind of acoustic material available for composi-

tion." (ibid.) This ever new and ever growing sonic world served several aesthetic goals, the creation of acoustic environments being, without doubt, one of them. Atmospheric sonic spaces were needed in music for the movies as well as in creations by the avant-garde. R. Murray Schafer's concept of soundscape (which encompasses sounds from nature, cities, offices, media, etc.) even regards the world as basically a musical environment in itself (Schafer 1977: passim). Listening to music as atmosphere means not paying attention to sophisticated structural devices in the way Theodor W. Adorno described his type of ideal, structural listener (Adorno 1997: 182). The atmospheric attitude is more "superficial" in a neutral sense of the word. It allows very basic features of music, such as the key mode, the use of instruments and instrumental colours, the employment of consonances and dissonances, the association with genres, eras, the general tempo, forms of movement, and codified emotional contents, to dominate the sense of hearing and its affective responses. But this domination should have clear limits; game music "must be out of the way without being boring, it must intrigue and encourage the player without getting obnoxious and it must withstand repeated listenings." (Peter McConnell, Adventures of a Composer, as cited in: Wood 2009: 132) Its power is the power of the background. Historical models can be found in narratives about the ancient god Hermes, who knew how to make the monster Argus fall asleep by playing some instrumental lullaby, in all kinds musical entertainment for feasts (which is one of the few examples that Kant gives in order to illustrate the pleasurable effects of music without having to pay too much attention to it)[2], in Erik Satie's concept of *musique d'ameublement* (a kind of ambient music), or in Muzak's strategies to make working and shopping easier, and thus more effective, by playing selected background music in offices and shops. Yet, while in these phenomena the listener is tied to his role as a relatively passive consumer, which to some degree is also the case with film music, game music, however, accompanies and stimulates actions. Moreover, its flow is determined by the way the player acts. This is why game composers must invent very flexible scores that may change their features according to the game flow. These changes, however, should be as smooth as possible, in order not to interrupt the involvement of the player: a challenging task, indeed (Wood 2009: 132-133). Unlike most other art forms, game soundtracks are objects with defined attributes, which have the power to play with the player's moods, and must, in turn, react to the (subjective) input of the course of the game. The modulated player modulates the play. The distinction between receptive subjects and specified objects becomes blurred, as in Böhme's definition of atmospheres. This might even go so far that a musically ambitious player could use the game as a musical instrument, using the pre-composed sounds as elements of arrangement producing his/her own individual score. Intentionally or not, the

[2] See Kant, Kritik der Urteilskraft, B 178/A176.

player is a musician within the limits of the game set (Collins 2008: 106); he or she is – passively and actively – involved.

4 Some examples

Pac-Man (1980) made effective use of what today appears to be a very simple sound-chip technology. There is only music in the strict sense between the levels and, of course, at the beginning: an arpeggio in C major, followed by one in Db major, going back to C, which renders a somewhat "Spanish tone". It achieves its purpose perfectly as it creates the encouraging atmosphere of "getting ready for the fight". During the game, however, there are musical signals solely for the gaming activities: there is a sound like munching when Pac-Man eats the points, a jingle leading downwards when Pac-Man "dies", a constant siren or alarm-like sound, which becomes higher and faster, when Pac-Man eats the coins that enable him to follow the haunting ghosts for a couple of seconds. These two alarm signals, especially, create the atmosphere of urgency, high tempo, and remind the player of the time, which is running out. They stimulate a physical response: the player gets nervous, excited, raises his/her efforts, thus taking the risk of making mistakes. The Pac-Man-player finds himself in a simple, but completely involving sound environment. The type of sound used here, clearly electronic, artificial, and of limited "richness," corresponds with the kind of world that is created visually and with regard to the spectrum of mobility. Imagine what would happen to Pac-Man if he was placed in thickly-orchestrated, symphonic soundscape! Furthermore, the game's creator, Toru Iwatani, did not, could not aim to imitate reality. His goal had to be the creation of a virtual reality with a constricted potential to be taken for the "real world", but with a high, challenging gaming factor that, by the synchronization of action, vision and sound, could make the "real world" retreat before the game's actuality.

Less interactive, but also involving cases of mood modulation, are games that come with a soundtrack comparable to track compilations on CD. The racing game *Gran Turismo* (1997), for example, uses structures and sounds from rock/electronic songs (with and without voice) by several bands such as Garbage ("As heaven is wide"), Ash ("Lose control"), Cubanate ("Autonomy" among others), and Feeder ("Tangerine") etc., that rely heavily on fast, accented beats, distorted guitar riffs, and create the atmosphere of tension and independency. The arrangements are suited to encourage the player to speed up and to take the risks of racing hazardously. They can make him feel autonomous and "hard boiled". The musical atmosphere allows the player to picture him/herself being a part of the racing community; it contributes to the transformation of a purely virtual competition into a thrilling and

suspenseful experience for the player.[3] The positive response to this music was so huge that is was profitable for EMI to release a soundtrack album of *Gran Turismo* in 1998 on CD, which is supplemented by songs by David Bowie ("Scary Monsters" [and Super Creeps]), Blur ("Chinese Bombs"), and many others. For those players with a different kind of taste, Sony's PlayStation 3 has made it possible, since 2006, to hear their own racing music files on a memory stick or mp3 player. In particular, games like *Gran Turismo* are ideal cases to be accompanied by any kind of music, since the music is not an integral part of a certain, non-exchangeable atmospheric environment, but an essential factor of the player's involvement; it is supposed to appeal to and to activate the player in regard to the game's general subject matter: risky racing.

This is different with FPS such as *Doom* or *Half-Life* (1998, soundtrack by Kelly Bailey). While these games share some features with racing games (the player sees them through with the eyes of the avatar, the space on the screen is explored and thus becomes a very involving virtual reality), their music is much less exchangeable, because it is responsible for the creation of a determined atmosphere.[4] *Doom 1* and *Half-Life* use a similar kind of electronic hard rock. But in addition to being an atmospheric trigger for the tough activity, which mainly consists of killing ugly, monster-like aliens or demons from hell in the enclosed area of a space station or a subterranean laboratory, it is an integral part of the game's design. The gloomy sound of bass-oriented, distorted guitars and heavy drum beats create an acoustic equivalent to the claustrophobic atmosphere where daylight is never seen, in which armoured walls, heavy steel doors and technical devices are illuminated by neon light, and which seems to be populated by demons from horror films and aliens from science fiction thrillers. In both games, the music is complemented by the addition of dark ambient sounds such as pedals reminiscent of double basses in an orchestral score or by deep organ registers. Consequently, *Doom II: Hell on earth* (1994) emphasizes those ambient sounds, whereas *Doom 64* (1997, soundtrack by Aubrey Hodges) abstains from presenting any form of midi-rock and makes exclusive use of a morbid atmospheric sound environment in the sense stated above. This musical approach is comparable to procedures very common in movies, where the suspense in uncanny and horror fantasies is stimulated by a very similar soundtrack. It is interesting to note that the related genre of horror film often takes on the perspective of a FPS game, since the viewer identifies either with the monster's victim or hunter, and which depends on his or her sensual perceptions in the same way as a player is dependent on his or her avatar. This predominantly

[3] The obvious idea to combine rock songs with the racing theme might have been inspired by movies such as *Days of Thunder* (1990, D: Tony Scott, M: Hans Zimmer, songs by David Coverdale, Guns N' Roses); and has been continued, for example, in *Driven* (2000, R: Renny Harlin, M: Era) and in *The Fast and the Furious* (2001, R: Rob Cohen, M: Brian Transeau), both of which were turned into video games.

[4] For an exemplary detailed analysis of the sound design of *Doom 3* (2004), see: Fischer/Schlüter (2009).

subjective perspective is a crucial element of horror and gothic narratives (from Mary Shelley's *Frankenstein* or Edgar Allan Poe's fiction to Anne Rice's *Interview with a Vampire* and beyond) as it renders authenticity to the story (even to the fantastic, "unbelievable" parts), and facilitates the reader's, listener's or viewer's involvement. But a major difference between horror films and horror-like FPS is that the film music will, in most cases, underline the scary events on the screen (and thus exchanges the role of a chiefly atmospheric component with a more narrative, representational, less play-like function), whereas game music only provides the atmosphere and will even recede when it is necessary to hear the sounds of the creatures in order to locate them in the virtual space. Music in games often operates on a more basic and less explicitly descriptive level. It is supposed to leave some open space for the player's performance, which, of course, is surrounded by a specific diegetic sound design.

Very different music with very similar functions was chosen for the RPG series *Gothic* (2001-2010). The composer Kai Rosenkranz created an impressively ambitious score with the sound of a classical orchestra, whose tone and atmosphere recall in many ways Howard Shore's celebrated music for the *Lord of the Rings* trilogy, composed roughly at the same time. This was no accident, since the title *Gothic* does not refer to the tradition of horror stories, but to the gothic era, that is, the Middle Ages. Like Tolkien's world, the world of all four parts of *Gothic* is a realm of fantasy with basic features taken from common ideas about this period. *Gothic*'s Middle Ages is no historical era, but just the gloomy, dark, rough, heroic, and battle-scarred projection that Tolkien had imagined fifty years earlier. Thus, the music is not at all mediaeval, but instead uses a large symphonic orchestra and the tonal possibilities of the late romantic period, including its monumentality, its effective surfaces, and its ability to involve the listener's emotional faculties. Rosenkranz took up the idea of the game to create a contained world whose realism is as perfect as a virtual fantasy world can be. Being a co-developer of the game as well, his musical work began at a very early stage of the development:

> "It starts with the design sketches, looking at them in an early phase to see how the style is developing, then sitting down at the keyboard, and trying to enter the world, to generate appropriate themes, to find a mood through the instrumentation that brings what we want…" (Rosenkranz 2010)[5]

For him, music is clearly a means to evoke emotional responses that, on the one hand, support the general atmospheric design, but that, on the other, simply would not be there without the music; the visual components and the tactile performances would not have the same intensity. He places his emotion-related work in the background, but the background is a very powerful one:

[5] Translations G.H.

> "There are ways to convey any emotion. Sometimes it is expressed by the melody itself, and sometimes it is a trick of instrumentation. Those high-pitched, persistent backgrounds that provide an uncomfortable feeling, deep bass tones that you don't really perceive, more in regions of the stomach, not too much in the foreground…They have a greater effect through their subtlety…." (ibid.)

Two levels of musical background can be differentiated: the first is a very basic accompaniment by strings, winds and some brass, not very specific but characteristic enough to underscore the general exploration of the world. It transports the mood of the landscape, and signals a "normal" playing situation. This can be developed very quickly into a situation of more tension, when, for example, the player gets into a fight with some creature:

> "We try to accompany the game situation the player is in as he walks around the world exploring landscapes. The music should be discretely in the background and highlight the joy of adventuring. But when the player steps in a trap, for example, or draws his sword for a battle, or night falls, even banal things like that have to be captured musically." (ibid.)

When a fight occurs, the music takes on a faster, louder, and thicker texture, increasing these qualities the longer the fight endures, which, like the simple siren in *Pac-Man*, has an effect on the psyche and body of the player. A very special *coup de theatre* in *Gothic 1* was a virtual gig by the German mediaeval rock band In Extremo. Fans of the neo-mediaeval scene know the band form their performances in festivals such as historical fairs or the open-air concerts in Wacken. In the second chapter of the game (the new camp), In Extremo perform their version of the old Swedish ballad "Herr Mannelig" (in new Swedish). The characters in fact resemble the real band members and they are seen performing with their "historical" instruments such as harp, zyster, shalm, bagpipes, and different kinds of percussion. In addition to that, one sees a dancing woman (with few clothes) and a fire-eater, as one would expect in a mediaeval fair. But what is surely meant to be a special gag for the (primarily male) target audience, also participates in the creation of an involving mediaeval, gothic atmosphere, which becomes even more convincing because the sound system responds to the position of the player in regard to the stage. It makes a difference whether the avatar is close to it or not, faces it or has his back to it, is located more to the left or to the right of it, etc.

Gothic 3 clearly marks a further step in the development of musical game atmosphere. Here, Rosenkranz no longer resorted to high-quality examples of the orchestral instruments in a computer, but let real musicians, viz. the Bochum Symphony Orchestra, the FILMharmonic Choir Prague, the Japanese taiko band Gocoo, ethno-musicians etc., record his music. That led to an even more accomplished sound quality and to a vitality that can hardly be captured digitally.

The pre-recorded tracks were made interactive by cutting them into very small pieces and enabled the music system to choose (partly by chance), and according to the game situation, from a very large pool with flexible pitch and intensity, so that the change is barely recognisable. The diversity of the used material enabled the developer to create an adequate acoustic *couleur locale* for the places represented on the screen. The three worlds of the game are all very different from each other with regard to their features and atmosphere, as are their soundtracks. The icy Nordmar, a blend of Scottish Highlands and Mongolian Tundra, is characterized by dull, very deep percussion, Asian winds, didgeridoo, some exotic stings (plucked and bowed), and bagpipes, all of which are very slow and sustained. The desert world Varant, by contrast, sounds like an Arabian-Indian percussion mixture with a sitar melody, a choir and strings. Finally, the woodland Myrtana is dominated by more middle-European orchestral sounds (violins, cellos, clarinets, flutes, etc.), partly in deep and "uncanny" registers. The fight music in an Ork camp, however, involves the player with topical music from the symphonic battlefields, which can be found in 19th century orchestral scores as well as in 20th century soundtracks: monumental choirs, rhythmic pulsation, timpani rolls, signals from the brass section, etc.

Even though games like the *Gothic* series create a fantasy world, is it a world that consists of existing elements found in nature and the cultural history of man. The highly-developed graphic and sound chips make it possible and desirable to imitate those known elements and put them together in a new fantastic, but probable, credible way. The more the sound and graphic engines are designed to achieve verisimilitude, the more a player will be involved in the game flow, which leads to fun and the willingness to spend hours and hours, and to play the game over and over again. Music is a paramount factor in the creation of virtual reality, in its emotional plausibility, its atmosphere and, hence, a factor of the degree by which the player will be involved and have fun. To a large extent the objective qualities of the music fuse together with the subjective perceptions and reactions, and thus become a major condition for the interactivity of the game. And though a lot of this music will stay modestly in the background, standards of quality (of the melodies, the arrangements, the sound) are not to be neglected. Virtually every game has a musical fan community debating over this or that part of the soundtrack in blogs, or confirming, via Youtube commentaries, that their favourite game has "the best music ever", the composer is a "genius", and so on. They buy the soundtrack on CDs, attend soundtrack concerts, which shows that the music, which aims to create a certain kind of atmosphere, enters people's lives in a very powerful way. More than being "only" a functional soundtrack for a game, it obviously has the potential to touch the emotional budget, to modulate not only gaming but also real-life situations beyond the game. Like the game itself, its music is a kind of a play, and, like all plays, it possesses a twofold character: it is unreal, virtual, "as-if", on the one hand, but as such, it is necessary, "serious" business, and part of the aesthetic life of

the players, on the other. In creating a musical atmosphere that is able to modulate the game and, considering the importance of games for their players, elements of everyday life, video music soundtracks give room for the recovery of the enormous role that music can play in people's lives; a role that other more alleged sophisticated forms of music often seem to forget or neglect.

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