Video Game Music

Video game music is a genre of music most commonly found in video games but also in concerts and albums dedicated to this style of playing. Video game music has advanced tremendously over the past 40 years since when it first began in the 1970s; it has increased in complexity and has come from being rare to ubiquitous. In many modern video games music is an important element of gameplay in much the same way as in a movie.

Early (First Generation) Video Game Music

First-generation video games (that is, video games that were made in the 1970s or before that) were extremely primitive in terms of sound that was played during the game; this mostly could not be described as music and consisted primarily of sound effects. This was because the primary way of storing music and other audio at the time was on a compact cassette or record. These were relatively fragile and under frequent use these were prone to breaking, such as in an arcade machine and therefore they were generally not used. There were exceptions, however: in the second generation (1980s) a game called *Journey* was created. This used a cassette player to play music, but was very easy to break and therefore the game was basically a failure. The first videogame to incorporate sound was *Pong* (made in 1972), a two-player tennis game in which a 'bleep' sound could be heard

when the ball reached either players' racket. This was played on the 'Atari 2600', capable of playing only two tones simultaneously through the television. The Atari could play many famous arcade video games including *Space Invaders*, which featured an ominous rumbling rhythm as the enemies slowly descended down upon the main character and a beeping sound whenever one of

them was hit. The 'music' was only a small part of the gameplay, yet it supplied some important features, adding tension and speeding up as the player was forced to move faster and faster in the game. These sounds were produced digitally; a computer chip converted electrical impulses from the Atari into analog sound waves (ones that relied on the computer code frequency to change) to be played on the television speaker.

2nd Generation Video Game Music

The second generation of video games and thus video game music began in the early 1980s. Because many more advanced computer components were now less expensive to fabricate they were integrated into gaming systems. Arcade consoles now used upgraded sound chips similar to the microprocessors used in the Central Processing Unit of some 1980's computers. This was a massive breakthrough and allowed for eight or more tones to be played simultaneously. The music began being written by people with greater musical experience whereas previously it was often simply written by any computer programmer making the game who happened to have some musical experience. The music of these times was becoming increasingly important to the gameplay. This was because it was now often being used to hint that some critical element had just happened, was happening or was going to happen, such as that a large enemy was about to appear or that some special power-up was about to end. These 'cues' meant that it was now more difficult to play video games with no sound. The music also adjusted to the gameplay, with new music being used in new levels and in different places during each level, such as during a boss fight. Speech also was used in some games.

3rd Generation Video Game Music

Many famous tunes started appearing from the mid to late 1980s such as the theme tunes for *The Legend of Zelda* and *Super Mario Bros.* which are still very well-known. This proves the importance of 3rd generation video game music in that it started becoming a 'proper' style of music, not only as cues but actually using

themes and scores with many different parts to create a musically pleasing sound. In the mid 1980s musical sampling began being used, meaning that pre-recorded sound was played during the game, making it more realistic and less synthetic-sounding. However this was very expensive and the previous tone generation method was still used most often.

4th Generation Video Game Music

During the late 1980s consoles were commonly using ten channels (tones) for producing music and it was now also available to play in stereo format rather than mono for a more authentic sound. They were also often using sampling and ADSR effects (commonly found in synthesizers) for increased realism. 4th Generation music included improved versions all the previous successful elements of video game music in a; it used speech more often, music was more fun to listen to and could affects the mood and style of the game and was also important in knowing when a significant event was about to occur.

5th Generation Video Game Music

During the 1990s, more complex hardware allowed for more realistic audio and higher quality samples than previously available. Arcade games were now 'old' and most gamers used home gaming consoles such as the Playstation or Sega 64. These consoles used CD's to store video and audio data for games, allowing for more space and thus a higher sample rate and more channels (in 1996 the Sega Saturn was introduced, which could play up to 100 channels). Music could be played in CD quality; however this would not leave enough room for the game visuals and other vital technological gameplay areas. Music was beginning not to be limited by the technological advances in the console, but the producer himself. Music was also now able to adjust very well to the gameplay. For instance, *Joe Montana Sportstalk Football II* was a sports game in which running commentary was used throughout the entire match, adjusting to how you played the game. New genres of games were introduced, including Survival Horror as shown in Resident Evil, released in 1996. Music was played to create tension and fear and was crucial in for instance knowing if zombies were 'round the corner' or if your friends were about to get ambushed. Games about music and even rapping were introduced, where music was essential to gameplay. In 1998 a new form of music gaming was introduced in *Dance Dance Revolution* in which the player used an interactive dance mat to step on different parts of it in time with the music. Some games relied entirely on musical tracks imported into the console by the user (for instance racing games in which the track was made whilst the music played according to its dynamics, tempo and texture). Some games such as *Seaman* involved conversing with the computer using voice recognition and advanced computer technology or *Hey You, Pikachu!* In which the main character, Pikachu, was controlled by issuing voice commands.

Modern Day Video Game Music

From 2000 till 2010, video game music has become increasingly often fully orchestrated and mostly using voice dialogue rather than text. Video game music has become the focus of some concerts, especially in Japan. It is a very well-known form of music because it is a small but memorable part of most people's lives, and there are many sites dedicated to video game music such as *vgmusic.com*. Video game music albums and soundtracks are commonly released for popular games. Video game music is a vital part of most games, changing the mood, creating tension and supplying necessary cues.

General Characteristics of Video Game Music

- If the player stays in the same place the music should loop and not stop, therefore if it is designed well it will go from the end to the beginning smoothly and unnoticeably and feel as if it is an ongoing piece of music with no end rather than a recorded track looping over and over again (unless during a music game in which the music will usually be continually changing).
- Often video game music does not include lyrics, however it is not uncommon for video games to include soundtracks that would not be considered as video game music, such as pop and rock songs.
- Older music will sound more electric whilst newer music will often be fully orchestrated