

Y9 C2a MOTIFS & Minimalism

Exploring ways to develop music from small ideas in C20th Music

An exploration of MINIMALISM and COMPUTER & GAMING music.



A. Features of Music in the Twentieth Century (How Composers used the Elements of Music)

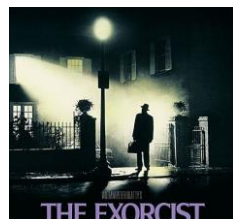
Melody & Dynamics	Harmony	Rhythm	Timbres and Sonorities
CONJUNCT - wide leaps, angular and spiky. CHROMATIC -uses all 12 notes (black and white) of the CHROMATIC SCALE . DISSONANCE - harsh sounds. EXTREMES OF DYNAMICS - (<i>pppp-ffff</i>) No clear melody/"tune".	ATONALITY – no (sense of) key. DISCORDS – dissonant, clashing chords.	SYNCOPIATION – half beat followed by full beat emphasising weaker beats of the bar. IRREGULAR TIME SIGNATURES – 5 or 7 beats per bar.	Strange, intriguing, and exotic sounds; striking, sometimes explosive, contrasts. PERCUSSION – expanded in orchestra and more emphasis on percussion timbre and sonorities. Unfamiliar sounds from strange instruments such as EXTREME PITCH RANGES and playing instruments in different and unusual ways. TOTALLY NEW SOUNDS often involving ELECTRONIC EQUIPMENT and MAGNETIC TAPE .

Minimalism

Minimalist pieces are often based on simple motifs or cells that are then manipulated or developed to create a complete piece of music. These motifs and the development is very similar to the use of leitmotif in film music. There is often no clear long melody. Minimalism is not only a musical style for orchestral composers but appears also in the Film music and is used in rock music. Two groups which write minimalist rock music are Kraftwerk and Talking Heads. Kraftwerk is a German electronic rock group whose music is often made up of very repetitive ideas: small melodies and vocal lines are used over and over again. Some songs by Talking Heads also use the same device and show this group's interest in using different types of styles in their music.

Famous Minimalist Composers include: Terry Riley, Steve Reich, Philip Glass, Michael Nyman.

TUBULAR BELLS (1972) – Mike Oldfield used minimalist techniques to write Tubular Bells. He made use of repeating patterns called **MOTIFS** that change gradually. This gradual change means that the “feel” of the music stays the same but the listener does not get bored. The music was used in the film The Exorcist.



COMMON FEATURES OF MINIMALISM & WAYS TO DEVELOP OR MANIPULATE A MOTIF

CELLS or **MOTIFS** – short simple ideas.

Use of **REPETITION** – also called **LOOPING**.



LAYERED TEXTURES BUILDING IN A PIECE

GRADUAL CHANGES OVER TIME

PHASE SHIFT (PHASE IN/OUT) – when two or more motifs or cells begin in **UNISON (together)** and gradually become “out of sync” with each other through displacement, either forwards or backwards.

METAMORPHOSIS – tiny changes are made over time to one note or to one part of the rhythm. This can go a “full circle” and end up exactly the same at the end.



ADDITIVE MELODY – adding notes to an original melodic cell gradually.

AUGMENTATION – doubling the note values of a motif or cell.

DIMINUTION – halving the note values of a motif or cell.



INVERSION (intervals upside down – mirror image)

RETROGRADE (backwards)

POLYRHYTHM - The use of several rhythms performed simultaneously, often overlapping each other to create a thick texture



Y9 C2b MOTIFS & Gaming Music



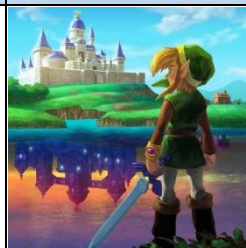
Early Computer and Video Game Music



Early video game music consisted primarily of **SOUND EFFECTS** (an artificially created or enhanced sound used to emphasize certain actions in computer and video games), **CHIPTUNES** or **8-BIT MUSIC** (a style of electronic music which used simple melodies made for programmable sound generator

(PSG) sound chips in vintage computers, consoles and arcade machines) and early sound **SYNTHESISER** technology (an electronic musical instrument that generates audio signals that may be converted to sound). **SAMPLING** (the technique of digitally encoding music or sound and reusing it as part of a composition or recording) began in the 1980's allowing sound to be played during the game, making it more realistic and less "synthetic-sounding".

How Computer and Video Game Music is used within a Game



Music within a computer or video game is often used for **CUES** (knowing when a significant event was about to occur).

Video game music is often heard over a game's title screen (called the **GROUND THEME**), options menu and bonus content as well as during the entire gameplay. Music can be used to **INCREASE TENSION AND SUSPENSE** *e.g. during battles and chases*, when the player must make a decision within the game (a **DECISION MOTIF**) and can change, depending on a player's actions or situation *e.g. indicating missing actions or "pick-ups"*.

Musical Features of Computer and Video Game Music

JUMPING BASS LINE

Where the bass line often moves by **LEAP (DISJUNCT MOVEMENT)** leaving 'gaps' between notes



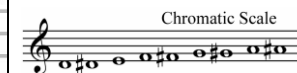
STACCATO ARTICULATION

Performing each note sharply and detached from the others. Shown by a dot.



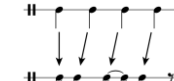
CHROMATIC MOVEMENT

Melodies and bass lines that ascend or descend by semitones.



SYNCOPIATION

Accenting the weaker beats of the bar to give an "offbeat" jumpy feel to the music.



How Computer and Video Game Music is Produced



Fully-orchestrated **SOUNDTRACKS** (video game music scores) are now popular – technology is used in their creation but less in their performance. The composer uses **MUSIC TECHNOLOGY** to create the score, it is then played by an **ORCHESTRA** and then digitally converted and integrated into the game. Video game

SOUNDTRACKS have become popular and are now commercially sold and performed in concert and on dedicated radio shows.

Character Themes in Computer and Video Game Music



Characters within a video game can also have their own **CHARACTER THEMES** or **CHARACTER MOTIFS** – like **LEITMOTIFS** within Film Music. These can be manipulated, altered and changed – adapting the elements of music – **ORCHESTRATION** (the act of arranging a piece of music for an orchestra and assigning parts to the different musical instruments), **TIMBRE, SONORITY, TEXTURE, PITCH, TEMPO, DYNAMICS** – depending on the character's situation or different places they travel to within the game.

Famous Computer and Video Game Music Composers and their Soundtracks



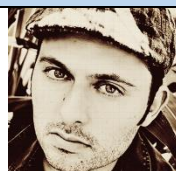
Koji Kondo

Super Mario Bros. (1985)
The Legend of Zelda (1986)



Daniel Rosenfield

Minecraft (2011)



Rom Di Prisco

Fortnite (2017)

Key Words

Sound effects - an artificially created or enhanced sound used to emphasize certain actions in computer games

Synthesiser - an electronic musical instrument that generates audio signals that may be converted to sound

Music Technology – Computer programs specifically for composing music

Orchestration - the act of arranging a piece of music for an orchestra and assigning parts to the different musical instruments

Sampling - the technique of digitally encoding music or sound and reusing it as part of a composition or recording