

Forms of Media

- **Diegetic sound** - sound that is included in the action on screen.
- **Non-diegetic sound** - sound that is not included in the action on screen.

| Visual | Non-Visual | Live |
|----------------|------------------|------------------|
| Video Games | Jingles | Theatre |
| Movies | Podcasts | TV shows |
| TV shows | Radio broadcasts | Radio broadcasts |
| Installations | | |
| Advertisements | | |
| Animations | | |

Types of Sound Creation 1

Foley

- Creating and performing everyday sounds using physical props.
- Performed and recorded live in a recording studio using microphones.
- E.g. sounds used to match action in visual media:
 - Movie: character walking.
 - Physical props: pair of shoes and wooden surface.
 - Performance: recording tapping of the shoes in time with the footage.
- Recording of Foley needs as quiet a space to minimise background noise in the recording.
- Requires a microphone with a directional polar pattern.
- A major benefit of Foley is that your sound effects will be synchronised with the actions on screen.

Ambience

- Sound present to give a sense of location.
- e.g. non-diegetic background in a desert might include animal noises, wind sounds, etc.
- May also include effects used to give a sense of space (e.g. reverb for room size or EQ for distance)
- Usually created by layering multiple recordings together of each of the constituent sounds.
- Could be either recorded environmental sounds, sounds from a library or sounds created using synthesis.

Spot Effects

- Sounds which are generated to enhance particular moments in a form of media.
- e.g. to add impact to an action on screen or add emphasis to text on screen.
- You can use musical instruments to create spot effects or you can use other sounds.
- These have the most impact when several sounds are layered together.

Voice-over

- Used in a range of forms of media.
- Most commonly used in advertisements and film trailers.
- A voice-over is like a narration. If you can hear a voice, but it is not from a visible character or person, then it will be a voice-over.
- Recording a voice-over can be a simple task but there are a number of considerations to ensure a successful recording:
 - Background noise level - minimise to improve signal-to-noise ratio.
 - Microphone choice:
 - Microphone type - condenser or dynamic microphone
 - Frequency response - how the microphone will colour the sound
 - Polar Pattern - directionality and null point
 - Proximity to microphone - proximity effect to boost bass sounds
 - Plosives - stop p's & b's causing distortion
 - Reflectiveness of the room - isolation booth or acoustic treatment to reduce reverb.

Types of Sound Creation 2

Dialogue

- Dialogue is diegetic.
- Includes any speech in a form of media that comes from a character or person on screen.
- Can be recorded on location during filming or overdubbed post filming.
- Three main reasons why you would overdub dialogue:
 - Dialogue captured on location has too much background noise.
 - Using a different voice actor from the one in the footage.
 - Overdubbing or 'dubbing' the dialogue in different languages.
- One problem with recording dialogue post filming is not being in the same location as the footage is from.
- As a result, recordings can often sound out of place as the acoustic space is completely different.
- A room tone recording is a long recording of the natural sound of a space.
- This can be used to fill in silences between dialogue overdubbing

Underscore

- Any music that is added to a form of media.
- Can be original music created specifically for the media or music that already exists in its own right, and that is repurposed.
- Synthesisers are commonly used in underscore to create atmosphere.

| | Advantages | Disadvantages |
|---------------------------|---|---|
| Original Music | <ul style="list-style-type: none">• Will match actions/emotions on screen.• Composer will receive royalties for use of music | <ul style="list-style-type: none">• May require external composer.• Takes time and money. |
| Pre-existing Music | <ul style="list-style-type: none">• Takes less time.• Consumers will be familiar with music.• Could attract target audience to engage with media. | <ul style="list-style-type: none">• Might not be possible to get licence to use music you want.• Can be expensive to obtain licence.• May require editing to match actions/emotions |

Methods of Sound Creation 1

Physical Props

- Used to create Foley.
- Sometimes it is necessary to edit or process the audio within your DAW to suit the media. Methods could include:
 - Cutting.
 - Trimming.
 - Looping.
 - Time-stretching.
 - Adding reverb to match the physical space.
 - Using EQ to make something seem close or further away.

Digital Sample Manipulation

- When a sample is treated in different ways to change how it originally sounded.
- Within a sampler you could:
 - Loop: repeat a sample until the key is released.
 - Truncate/Trim: change the length of the sample.
 - Pitch Map: speed up or slow down the sample to change the pitch.
- You could also use audio effects plugins:
 - Use reverb to place the sample in a different space.
 - Add distortion to change the tone of the sample.
 - Use EQ filters to make the sample sound further away.
 - Use EQ filters to make the sample sound as though it is coming from a small speaker or headphones.
- Time stretch
- Transpose

Effects Libraries

- Effects libraries used to be stored on physical hardware (CDs/DVDs).
- Today, effects libraries are stored online.
- Sound effects can be filtered using various categories or by using a search function making them accessible and easy to use.
- Effects libraries contain sound effects that have been created using various types and methods of sound creation.
- There are three categories of effects libraries:
 - Commercial libraries - are professionally recorded sound effects that can be purchased for a fee. These can then be used royalty free in your sound creation projects.
 - Online resources - Online resources contain both professional and amateur recordings of sound effects. They can either be entirely free to use or include a one off or subscription fee to use royalty free.
 - DAW loops - DAW loop libraries may contain some effects such as risers and impacts that can be used to create sounds such as spot effects.

Methods of Sound Creation 2

Environmental Sounds

- The background sounds of a place or space.
- In order for environmental sounds to be useful, they must be long recordings because our brains are able to notice patterns very easily.
- Potential issues with recording Environmental Sounds:
 - Sounds that are not desired for the recording are recorded which cannot be removed.
 - Requires portable equipment that requires a power source.
 - Requires travel to specific locations.
 - Winds can cause the microphone to distort leaving the recording unusable.
- Usually best recorded in stereo because it will give the listener a sense of physical space:
 - Requires the use of two microphones to capture the sound.
 - Most common stereo microphone technique is an XY coincident pair.
 - Could also use Mid-Side technique but this will require additional processing.

Sound Synthesis

- A method of sound creation that uses waveforms and controls within a synthesiser to create sound effects.
- Mostly used to create sounds that are not realistic, like a laser gun in a science fiction film.
- Could also be used to create more realistic ambient sounds such as wind or rain.
- Sound effects using a synthesiser generally start from an initialised patch - the synth in its most basic state.
- This allows you to:
 - Create a completely original sound.
 - Easier to understand what routing is affecting the sound.
 - More control over different parameters.
- Synthesisers can also emulate realistic instruments that could be used for underscore.
- A sub drop is an example of a musical or non-musical use of sound synthesis.
- This could be used in underscore to create a transition in the music or this could be used as a spot effect to add emphasis to an action or moment in the visual media.