Design Course

The Process Of Creating Sound For Animation
Giving Treatments or Special Effects to the Track
by
Phidi Pulu
IDC, IIT Bombay

Source:
https://www.dsource.in/course/process-creating-sound-animation

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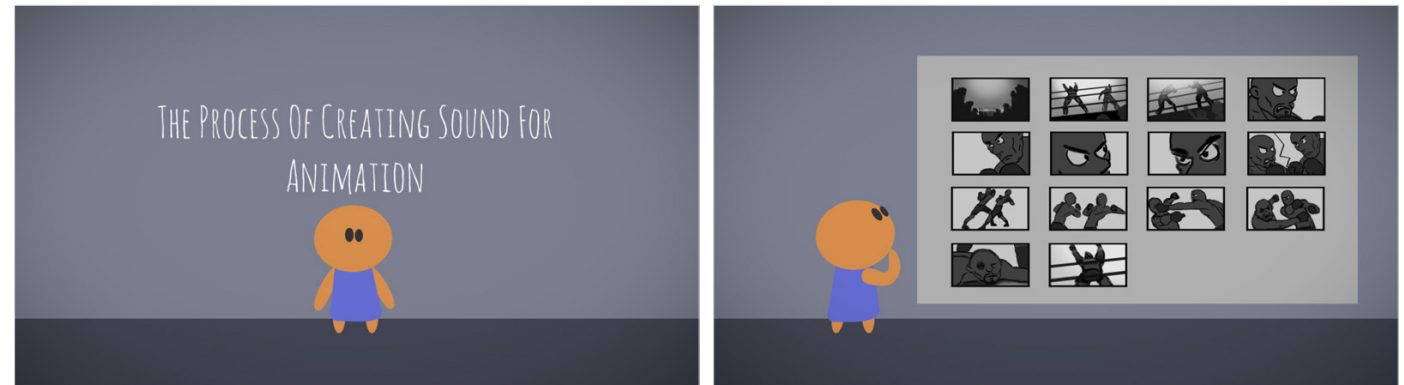Giving Treatments or Special Effects to the Track
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Introduction

Sound for Animation starts at an early stage, when the Animation is still at the storyboard phase. Here the Sound designer, going through the storyboard, makes a sound map for the film. Initial rough sound tracks also known as "Scratch Tracks", are produced at the time of Animatic. Scratch tracks are used to work out the timing of an Animation and to get the feel of how the visuals and audio will work together in the final Animation. They also guide in syncing the final sound tracks with the visuals.

Once Scratch tracks are done, final Dialogues, Music, Sound Effects and Foleys necessary for the animation are recorded accordingly. Recording happens bothat the Preproduction as well as at the Postproduction phase.These recorded pieces do not make much sense independently. But once all these recorded pieces are handed over to the Sound Editor, he brings these recorded pieces together to a single track by layering, which is also referred as "Track Layout", and then "Mixing" them. The track makes much sense and when in sync with the visuals,it adds to the quality and enhances the story tellingin a very effective manner to the audience.

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Process

At the Mixing phasewhole lot of treatments or special effects are given to the track, such as:

EQ:
Equalization, or EQ for short, means boosting or reducing (attenuating) the levels of different frequencies in a signal. The most basic type of equalization familiar to most people is the treble/bass control on home audio equipment. The treble control adjusts high frequencies; the bass control adjusts low frequencies. Where as Advanced equalizers have fine controls for specific frequencies. Equalization is most commonly used to correct signals, which sound unnatural. For example, if a sound was recorded in a room, which accentuates high frequencies, an equalizer can reduce those frequencies to a more normal level.

Compression:
Compression means reducing the dynamic range of a signal. All signal values above a certain adjustable threshold are reduced in gain relative to lower-level signals. This creates a more even signal level, reducing the level of the loudest parts. Limiting is an extreme form of compression. Rather than smoothly reducing the gain of successively higher levels, all signals above the threshold is limited to the same gain. This creates a very hard cut-off point, over which there is no increase in level.

Compressor will begin smoothly reducing the gain above the threshold; a limiter will almost completely prevent any additional gain above the threshold.

Reverb:
Reverb is short for Reverberation, the effect of many sound reflections occurring in a very short space of time. The familiar sound of clapping in an empty hall is a good example of reverb.

Reverb effects are used to restore the natural ambience to a sound, or to give it more fullness and body.

Delay:
Delay is a simple concept — the original audio signal is followed closely by a delayed repeat, just like an echo. The delay time can be as short as a few milliseconds or as long as several seconds. A delay effect can include a single echo or multiple echoes.

Delay also forms the basis of other effects such as reverb, chorus, phasing and flanging.

After the treatment or special effectsare given to the sound,the manipulations of soundare done through blending, equalizing, adjusting and balancing.

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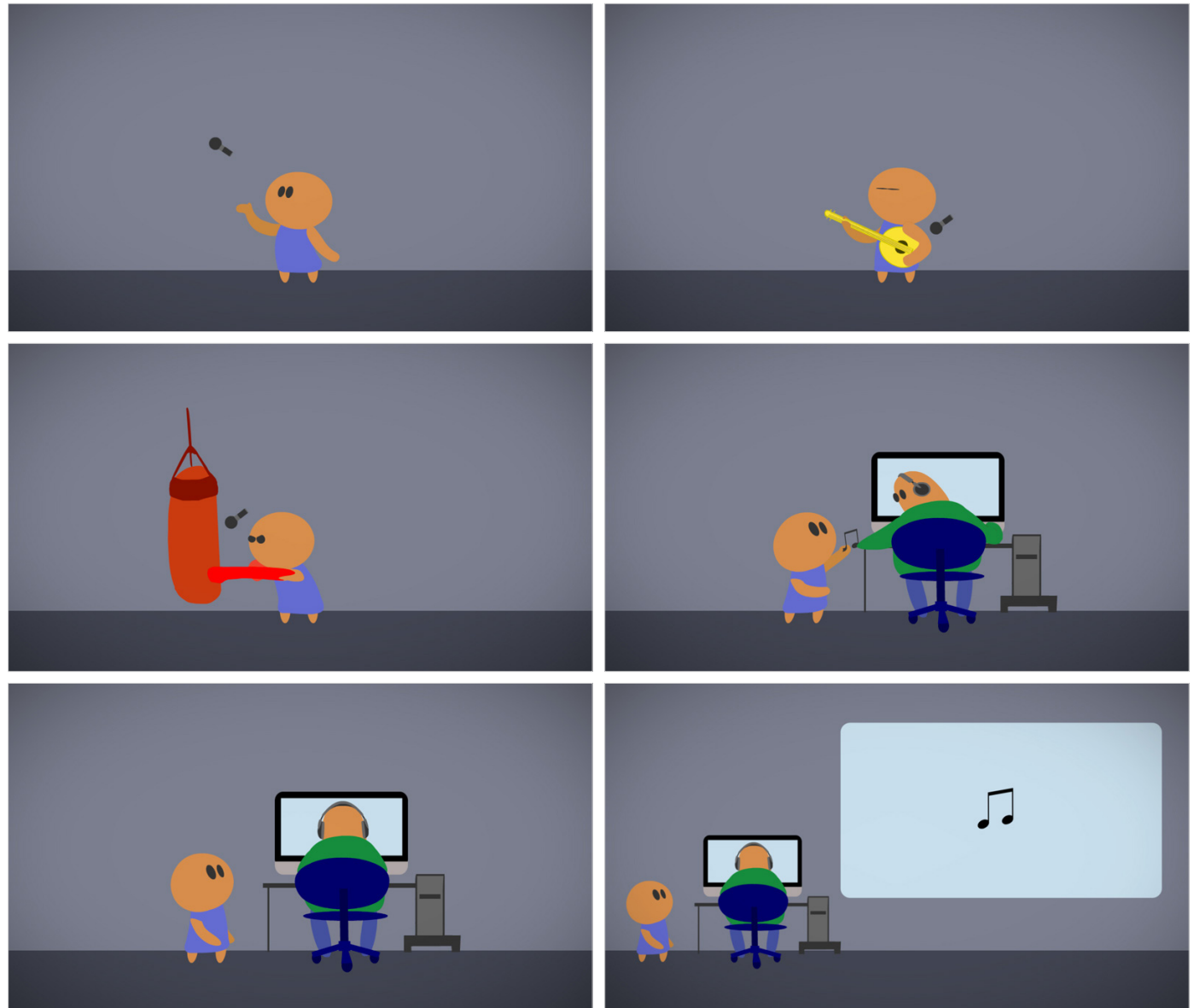by
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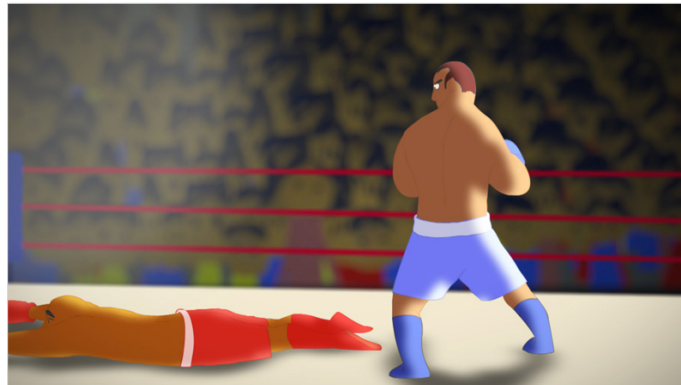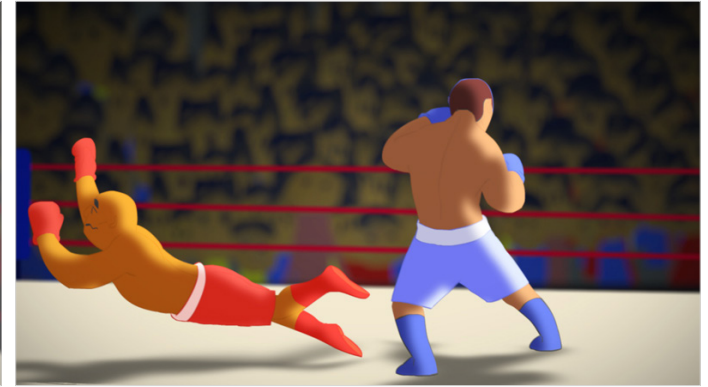by
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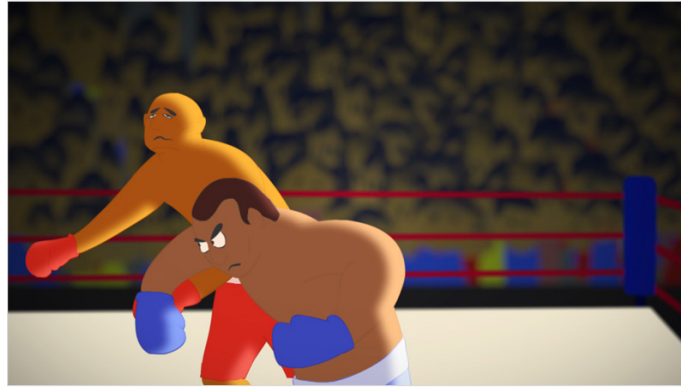by
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Video

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Design Tools

Animation Design:

Animation is a method of photographing successive drawings, models or even puppets to create an illusion of movement in a sequence. Animation Tool is developed by IDC, IIT Bombay. It is an interactive web space where students can learn about the basics of animation. There are four main types of animation that are commonly used: 2D Traditional Animation, 2D Computer Animation, Stop Motion Animation, and 3D Computer Animation. There's also something called Experimental animation, where you can mix different types of animation together. The Animation Tool teaches things like Straight Ahead, Pose to Pose, Stretch and Squash, and Slow in Slow out, which are all important for making animations look good.

For more information visit: https://dsource.in/tool/animation_tool/

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Contact Details

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