FILM SOUND

SOUND PRODUCTION

SOUND PRODUCTION - ASPECTS & PROCESS

- Design
- Recording
- Editing
- Mixing

SOUND DESIGN

- Sound designers are involved in all three phases of film production (pre-, production, post-)
    - Since art direction, composition, lighting, and acting decisions influence how sound tracks are recorded and mixed
- Sound designers oversee a film's entire sound process and all sound crews: recording, rerecording, editing, mixing, and sound-effects

GUIDING PRINCIPLES OF SOUND DESIGN

- A film’s sound can be as expressive as its images
- Image and sound can create different worlds
- Image and sound are co-expressible

SOUND DESIGN PROCESS

- In pre-production, identify all the sounds necessary to the plot and shots
- And all related background tones and sound effects
- Supervise implementation of sound design during production
- Oversee editing and mixing in post-, keeping an ear tuned to storytelling

SOUND RECORDING

- Dialogue is typically the only film sound recorded during production
    - Everything else is added in the editing and mixing stages

SOUND RECORDING

- Recording team consists of:
  - Sound mixer
  - Sound recordist
  - Microphone boom operator
  - Gaffers (who make sure the equipment works)
- They place and/or move mics so sound corresponds to the space between actors and camera
- And work to minimize background noise

SOUND EDITING - TEAM

- Supervising sound editor
- Sound editors
  - Dialogue
  - Music
  - Sound effects

SOUND MIXING

- Sound mixers
- Rerecording mixers
- Sound-effects personnel
- Foley artists

SOUND MIXING

- Mixing is the process of combining different sound tracks into one composite sound track synchronous with the picture

SOUND MIXING

- Each type of sound occupies an individual sound track combined into a multitrack sound design
- Mixers adjust the loudness and various aspects of sound quality
- Filter out unwanted sounds
- And create the right balance of dialogue, sound effects, and music

BECOMING AWARE OF SOUND

THE POWER OF FILM SOUND

- Engages physiological and psychological senses
- Helps create naturalistic and immersive film worlds
- Shapes our interpretation of images
- Directs our attention to details

THE CONVERSATION

- A (character) study in shifts
  - Shift from creating to interpreting recordings
  - Shift from objective to subjective reality
  - Shift from observer to participant

SOUND AWARENESS

- Types
- Perceptual Properties
- Dimensions

TYPES

- Speech
- Sound effects
- Music

Hierarchy

PERCEPTUAL PROPERTIES

- Loudness
- Pitch
- Timbre

LOUDNESS

- Volume
- Constantly manipulated
- Contributes to **sound perspective**
  - Used for spatial orientation
  - Loudness related to perceived distance

PITCH

- Perceived highness or lowness
- Allows us to pick out distinct sounds
- Contributes to characterization and mood

TIMBRE

- Sound's harmonic components
  - Character, color, texture
  - Involves blending and highlighting
- Fleshes out the film world
- Helps articulate emotion and atmosphere

DIMENSIONS

- Rhythm
- Fidelity
- Space
- Time

RHYTHM

- Structure of the sound, gives it a sense of motion, flow, and/or purpose
- Involves
  - Tempo
  - Beat
  - Pattern of accents (stronger or weaker beats)

TEMPO AND BEAT

- Tempo
  - How fast or slow the rhythm feels
  - Based on beats per minute
  - More beats per minute = faster; fewer beats per minute = slower
    - Faster = dramatic and exciting; slower = more peaceful and calm
- Beat
  - Regularly occurring pattern of sounds that are alternatively soft and loud

FIDELITY

- How faithful a sound is to the source as we perceive it
  - Foley

SPACE

- Sound contributes to our understanding of the film world and spatial orientation within it
- Involves
  - Sound perspective (loudness based on perceived distance)
  - Diegetic and non-diegetic sounds

NON-DIEGETIC SOUND

- Comes from a source outside the story world
  - Music scores
  - Omniscient narrators commenting upon or “captioning” images
- And can only be experienced by viewers, not characters in the world

DIEGETIC SOUND

- Has a source in the story world
  - Spoken words, object sounds, music created within the world
- Can be produced by onscreen or offscreen source

DIEGETIC SOUND

- Includes **external** and **internal** diegetic sound
    - External: arises from a physical source in the scene
    - Internal: comes from mental or perceptual sources
        - Subjective hearing, memory, thought

TIME

- Synchronous
- Asynchronous
- Simultaneous
- Nonsimultaneous

SYNCHRONOUS & ASYNCHRONOUS SOUND

- Synchronous
  - Typically directly connected with onscreen events
- Asynchronous
  - Doesn’t match any of the visible sources onscreen
    - Adds to overall realism or provides emotional nuance

SIMULTANEOUS & NONSIMULTANEOUS SOUND

- Simultaneous
  - Sound occurs at or in the same time as its source within the shot
- Nonsimultaneous
  - Sound occurs earlier or later than the events we see in the shot

NONSIMULTANEOUS SOUND

- Sonic flashback
  - Character remembers things said in earlier scenes
- Sound bridge
  - Sound from the previous scene lingers briefly while an image from the next scene appears
  - Or sound from the next scene begins while images from the present scene remain onscreen