FIELD AUDIO RECORDING

JON WHITING
THE IMPORTANCE OF GOOD SOUND

- Video is dependent on audio
- The fastest way to decrease a video’s quality is to decrease the audio quality
SOME BASICS
CABLE CONNECTORS

XLR

1/4"

1/8" (3.5mm)

RCA (Composite)

CABLE CONNECTORS
BIT DEPTH

16 Bit

24 Bit

Audio
METERING

• $0\text{dBvu} = -18\text{dBfs}$

• Aim for recording an average volume (not peak volume) of roughly $-18\text{dBfs}$
Audio Sync

What does the clapper do?

Why do we use it?
MICROPHONES

• Microphones convert acoustic energy into electrical energy

• Different types of microphones for different applications

• Decent audio is possible without expensive equipment
MICROPHONES

• Handheld
• Lavalier / Lapel
• Studio
• Shotgun
MICROPHONE PICKUP PATTERNS

• Omni-Directional
  Accepts sound from all around

• Cardioid
  Accepts sound from the front

• Hypercardioid
  Extremely tight pickup from front

• Bi-Directional
  Accepts sound from front and rear
HEADPHONES!

- If you aren’t using headphones, you’re probably doing it wrong
- How else can I tell what’s happening in my audio?
- Visual levels alone don’t cut it
- Trust your ears first! If it sounds good, it sounds good.
TELL TALE SIGNS OF BAD AUDIO

• Hiss
• Static
• Low Levels
• High Levels
• Popping
AMBIENT NOISE: BLESSING AND CURSE

• The Blessing:
  • Ambient Noise gives us an idea of location without seeing it
  • We NEED ambient noise in video to make the audio sound right for the scene

• The Curse:
  • It also can interfere with a clean recording
FIELD RECORDERS

- Multiple types of portable recorders
  - Flash card based
  - SD card based
  - CD/MiniDisc
  - Hard Drive Units
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