Effects and Production Techniques
Reverb

• “The persistence of sound after a sound is produced”
• Sometimes called echo

Video Ex: The Wiki Drummer
https://www.youtube.com/watch?v=mY-f68J5PPo

Guitar Demo
Reverse Tape Effect

• Hearing music backwards

• Playing records backwards (usually manually)

• Tapes

• Musique concrète, 1950s experiments
  – Varies speeds of tape; effects, like reverb; reverse

Video Ex: The Beatles – “Tomorrow Never Knows” Tape Loops
https://www.youtube.com/watch?v=rrzq7SbmhgE
Reverse Tape Effect (cont.)

• Sound fades in
  – guitar, piano, drums normally get quieter right after being struck

Ex: Yes – “Roundabout” (1971) piano intro

Guitar:
Ex: The Beatles – “I’m Only Sleeping” (1966) 1:30

Ex: Red Hot Chili Peppers – “Give It Away” (1991) 1:40
Reverse Tape Effect (cont.)

Ex: Jimi Hendrix Experience – “Are You Experienced?” (1967)
drums intro

vocals in chorus

• Post tape-recording technology (software)
• Digital pedals
Reverse Tape Effect (cont.)

• **Backmasking**
  – A deliberate process

• “Hidden messages” in recordings

**Satanic message?**

*Ex: Led Zeppelin – “Stairway to Heaven” (1971):30*
https://www.youtube.com/watch?v=IXpEtF4i1oI

**Poking fun:**

*Ex: Weird Al Yankovic – “I Remember Larry”*
https://www.youtube.com/watch?time_continue=39&v=PNL1IYc3A7k
Octave Effect

• What is an octave?
  – Guitar; adult and child voices

Video Ex: MOOER Octave Pedal :50
https://www.youtube.com/watch?v=eb8kCcZ5EO4

• Can lower or raise the pitch of an instrument

• Or you can double the original signal (“thick” sound)

• Hendrix – one of the first to use this pedal
Octave Effect (cont.)

Vocals:
• Scary monster voices
• High chipmunk voices


Video Ex: Tom Morello Whammy Pedal (1:20)
https://www.youtube.com/watch?v=Ti27CmWD0kg
Harmonizing

- What is harmonizing?
  - Vocals, guitars

Ex: The Beach Boys – “Unreleased Backgrounds” (1966)

Ex: The Allman Brothers Band – “Jessica” (1973)
Harmonizing (cont.)

Effects pedals:

**Video Ex: PS-6 Harmonist**
https://www.youtube.com/watch?v=Xe-Vy3HDyQ4

**Video Ex: TC Helecon Harmony G XT (2:10)**
https://www.youtube.com/watch?v=6RApvmAbceg
Loopers

• Layers of sound, live

Video Ex:
Reggie Watts Looping Machine
https://www.youtube.com/watch?time_continue=49&v=Gq3KJg-5YOM

Video Ex: Zoë Keating – Avant-Cello
https://www.youtube.com/watch?v=zcdlHt36uqw
Production Techniques: Acoustic Guitar in a Mix

• “Hidden”
• Thickens the sound

Ex: Sam Cooke – “Tennessee Waltz” (1964)

Ex: Rolling Stones – “Satisfaction” (1965)

Ex: Rolling Stones – “Brown Sugar” (1971)
Production Techniques: 
Double Tracked Vocals

• Duplicate a performance: big sound
• Vocals, guitar

Full recording & Isolated vocal videos:

https://www.youtube.com/watch?v=QoQWxwmcIWs

**Video Ex: Eminem “Lose Yourself” (2002)**
https://www.youtube.com/watch?v=T8a-4W0aBK4
Producer as Musician

• Typical role of producer
• Hands on or hands off

• Mixing board as instrument:
  – George Martin
  – Several Dub innovators
Dub

• Term widely used to describe a **remix**
  – Esp. in dance music

• 1968-70: Jamaican studio remixes, called **versions**
  – Most or all vocals removed

• 1972: Radically remixed versions as B-sides

• 1973-4: Dub Albums
King Tubby

• One of the first Dub masters

Original recording:

Dub:

• One of the first dubs to credit Tubby
Blackboard Jungle (1973)

• One of the first Dub LPs
• Credited to The Upsetters (Lee “Scratch” Perry)
• Mixed by King Tubby

Ex: Bob Marley & The Wailers
   – “Dreamland” (1970)

Ex: The Upsetters –
   “Dreamland Dub” (1973)
**Super Ape (1976)**

- Lee “Scratch” Perry & The Upsetters
- By 1977 virtually all producers had Dub albums
- Producer a Musician
- Mixing Board as Instrument

Ex: Lee Perry – “Super Ape” (1976)
King Tubbys Meets Rockers Uptown (1976)

- Augustus Pablo and King Tubby
- Series of King Tubbys Meets...

Ex: King Tubby and Augustus Pablo
   – “King Tubby Meets Rockers Uptown” (1976)

Video Ex: Dub, King Tubby’s Style
https://www.youtube.com/watch?v=RTaZFGwg2rY
Prince Jammy/King Jammy

  • Original vocal track

Ex: Prince Jammy – “Music Dub” (1977)
  • Albums *In the Light* and *In the Light Dub*
The Producer’s Overdubs

• Sometimes a producer will add something to a band’s recording

• Released version from *Let It Be* (1970)
• Orchestral and choral overdubs by Phil Spector

• From *Let It Be ... Naked* (2003)
• No overdubs
The Producer’s Overdubs

Ex: Bob Marley & The Wailers – “Concrete Jungle” (1973)
• From *Catch A Fire* (1973)
• International audience, Chris Blackwell
• Lead guitar, organ

Ex: Bob Marley & The Wailers – “Concrete Jungle” (1973)
• Unreleased Jamaican version, no overdubs
Live Orchestration

• All instruments recorded simultaneously
• In this case, Hayes is songwriter, performer and producer

Video Ex: Isaac Hayes – “Theme From Shaft” (1971)
https://www.youtube.com/watch?v=Lytb0fgJ6vY
• Vocals recorded afterwards