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

Video Ex: The Wiki Singer
https://www.youtube.com/watch?v=dWNV_JFolLg

Guitar Demo
Synthesizer Pedal

Video Ex: Roland Guitar Synth GR-20 (5:40, 10:20)

• Electric guitar with a synthesizer effects pedal

https://www.youtube.com/watch?v=cVwM-3Duy8U
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

Ex: Missy Elliot – “Work It” (2002) 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](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](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)

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

Vocals:
• Scary monster voices
• High chipmunk voices

Ex: Kendrick Lamar
  – “Swimming Pools (Drank)” (2012)

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=QoQWxwmclWs

**Video Ex: Eminem “Lose Yourself” (2002)**
https://www.youtube.com/watch?v=T8a-4WOaBK4
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: 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 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
• 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