# **FrontPage**

## Welcome to the RTF 318 Wiki!

## THE LENS

Four main functions controlled by the lens:

- Image Focus
- Quantity of light
- Image Área
- Depth of field . Controlled by three factors:
  - Lens Opening
  - Focus DistanceFocal Length

Depth of Focus

Fast lenses and slow lenses

Hyperfocal Distance

Depth of Field and Format

Depth of field charts

The lens and perspective

The lens and perception (size constancy)

## STILL PHOTOGRAPHY

Basic operations of a single lens reflex 35mm still camera

Exposure and interrelationships of shutter, aperture and film speed

#### VISUAL DESIGN AND STRUCTURE

## THE FRAME AND ASPECT RATIO

The 7 visual components:

## 1) Space

- deep, flat, Ambiguous / recognizable , Open / closed
- Depth Cues

## 2) Line

- Horizontal
- Vertical
- Diagonal
- Curved/Straight
- Emotional Qualities

3) Shape

- Two-dimensional: circle, square, triangle
- Three-dimensional: sphere, cube, pyramid

## 4) Tone

## Control though:

- art direction (reflective)
- lighting (incident)
- exposure (less selective)

#### Coincidence and Non-coincidence

#### 5) Color

- Hue
- Brightness
- Saturation

#### 6) Movement

- Object movement (this means actors too!)
- Camera Movement
- Audience point of attention (continuum of movement within the shot and shot-to-shot)

#### 7) Rhythm

- Alternation : is changeRepetition (of an alternation)
- Tempo (of the repetition of alternation)

Graphing Visual Structure

Graphing Components + Subcomponents

Rule of thirds

Balance

Headroom

Eyeroom (looking room)

Aspect ratio

#### THE SHOT

Three Basic Shots

Hybrids and Hollywood slang

The shot described by angle

The shot described by movement

The shot described in terms of coverage

#### SCREEN GRAMMAR

Rabiger's approach to screen grammar as a reproduction of human consciousness

Master Scene Technique

Shot reverse shot technique

The 180 degree rule

Screen direction

## DIRECTORIAL COMMUNICATION TOOLS

Shotlists

**Overheads** 

Lined scripts

Storyboards

#### SCREENWRITING AND DOCUMENTARY PROPOSALS

Foundations: Premise , treatment , step outline

Formatting

Story and thematic Archetypes

The fatal flaw - passivity

The Vonnegut formula

Documentary research and the documentary proposal

#### SCRIPT ANALYSIS

**Editing Screen Directions** 

First impressions

The immutables - facts and images

Imaginative choices (antecedent action, objectives and actions, what's at stake, subtext etc)

#### **Events**

#### Beats

## **FILM/VIDEO INTERFACE**

Perception of motion

Film Camera

- Intermittent movement
- Pulldown claw
- Shutter
- Exposure time and Shutter angle formula
- Overcranking and Undercranking
- Calculating Lengths for Film

#### The Film Image

- Film layers Black + White
- Film Layers Color
- Color Balance
- Color Temperature and filters
- Keeping track of film edge & key numbers, keycode

## Video

- Analog and digital recording
- Video process
- Video controls
- Video standards NTSC, PAL & SECAM, HD
- Interlaced and progressive scanning
- Resolution
- Frame rates
- Compression
- Color Space
- Keeping track of video drop frame and non-drop frame timecode
- When film and video collide the 3-2 pulldown
- Flex files

## CONTINUITY/SHOOTING TO EDIT

## Continuity shooting

- Match Cuts
- ٠ Shooting out of sequence The script supervisor
- Types of continuity
  - - Action
    - Props Costumes and Makeup
    - Lighting
    - Eyeline
    - Screen direction
    - Sound
    - Performance

#### Maintaining continuity

- Role of the script supervisor
- Scheduling
- Changing Sizes and Angles
  Inserts + Cutaways
  Overlapping action

#### LIGHTING

Three-point lighting

Other lights (eye-light, set light, kicker, practicals etc.)

High-key lighting

Low-key lighting

Qualities of light (specular, diffused etc.)

#### Kelvin scale and color temperature

Incident light meters

**Reflective light meters** 

Footcandles

Lighting ratios

Choosing an F-stop

Latitude

Electricity Basics : Watts Ã. Volts = Amps

Inverse square rule

## EDITING

Murch's Rule of Six :

- Emotion (51%)
- Story (23%),
- Rhythm (10%),
- Eye-trace (7%),
  Two-dimensional plane of screen (5%)
- Three-dimensional plane of screen (4%)

Classic Hollywood Continuity Editing

Montage

Jump cuts

Misdirection

Seeing Around the Edge of the Frame

Why cuts work

Dragnet system of editing

Post Workflow

Online - offline

Three-point editing

### THE DIRECTOR/ACTOR DYNAMIC

The System and the Method: Stanislavsky to Griffith to Kazan

The actor's preparation

System of wants: life needs, objectives and actions

The crowbars of directing

Listening

Moment-to-moment

Personalization

Casting:

- Actor's abilityWhether the actor is right for the part
- Directibility
- Casting relationships

Getting actors:

- Auditions
- Meetings
- Offers

Casting Directors v. Talent Agents

## Stages of an audition

#### Rehearsal technique

#### **CREW ROLES**

Above the line

Below the line

Crew positions and functions

#### **OBJECTIVE SOUND**

Sound and audio distinguished (sound = acoustical energy, audio=electrical signals and

#### various types of recordings)

Properties of physical sound:

- Propagation
- Medium
- Speed
- Amplitude
- Wavelength and Frequency

#### Influences on Sound Propagation

- Source radiation pattern
- Absorption
- Reflection
- Diffraction

#### Doppler shift

Room acoustics/the three sound fields:

- Direct sound
- Discrete Reflections
- Reverberant field
  - Reverberation time (influenced by volume of the room and absorption of surface areas)

#### Movies and the three sound fields

- 1920s: Exhibition in reverberant spaces, production on anechoic stages
- Now: "dead" theatres and relatively "live" shooting conditions

Noise: unwanted sound added to the original sound (airborne and structure-borne)

Distortion: unwanted modification of the original sound

#### **PSYCHOACOUSTICS**

#### **Hearing Conservation**

Auditory Sensitivity and Frequency (most sensitive in 2-4 kHz range)

Equal Loudness Curves (more energy is required at lower frequencies to sound equally as loud as midrange and higher frequency sounds)

Loudness effect (at a lower level, sound seems to lack bass when compared with playing it as its original level)

Loudness vs Time (it takes a high level sound 1-8 frames at 24 fps to reach its full perceived loudness)

#### Frequency masking

Temporal masking

#### Spatial perception

- · Precedence effect (we locate sound in the direction of the first-arriving wavefront)
- Influence of Sight (exit sign effect)
- Localization best in horizontal plane
- The cocktail party effect

#### Separating Sounds :

- Timbre
- Localization

Auditory streams

Speech perception : panning dialogue across the screen to match action v. centering it

## AUDIO FUNDAMENTALS

Frequency response

Dynamic Range

Signal processing

Signal path

Digital audio:

- Quantizing
- Sampling
- Resolution

#### SOUND RECORDING

Microphones:

- Classified by Directionality : cardiod, hypercardiod, omnidirectional
- Classified by construction : dynamic, condenser
- · Classified by positioning (boom, fishpole, stands, hidden mics, lavalieres)

Audio Connectors and Inputs

Single System + Double System Recording

Slates

**Calling Shots** 

#### \*Recorders\*

- Analog reel to reel
- Digital Audio Recorders
- Hard drive recorders
- · Features of recorders (mic inputs, line inputs and outputs, record level adjustments, Volume Unit and Peak Program Meters etc)

#### **Record levels**

Audio Mixers (between the mics and the recorder)

Sound perspective

Phase cancellation, 3-1 rule

Proximity effect

Worldizing

#### SOUND DESIGN

Objective vs. Subjective Sound

Diegetic sound / Non-diegetic sound

Sound design philosophy

Withholding information

#### SOUND EDITING

Traditional (southern California) approach: vertical â?? one editor per reel

Alternative (northern California) approach: horizontal â?? editors cut like fx in all reels

Dialogue

- Production
- Wild lines
- ADR (automated dialogue replacement)
- Loop group
- Voice over
- Presence/fill/room tone (space between actor's lines or space between various things going on at start and end of takes or room tone

Sound effects: non-musical, non-dialogue sounds from the environment

- Hard fx
- Foley
- Ambient backgrounds

#### Checkerboarding

Avid Audio Basics

## INTRODUCTION TO DOCUMENTARY

Traditional narration-based documentary

Personal essay documentary

Cinema Véritécinema verite

Historical documentary and problems of access

## MUSIC VIDEO

Traditions: Busby Berkeley to the Beatles to Bowie

Cinematic v. Photographic

Performance based/non-performance based

## Laws of Note

Down here I am going to link to all of the "laws" and "rules" that I think we will definitely need to know.

Inverse Square Law

Murch's Law of six

#### Rule of Thirds

3-1 Rule

100 rule

\*Review with this quiz!\*