Creating a Successful "Video" Pitch

a crash course workshop in filmmaking, lighting and audio fundamentals

Brian Staszel, Carnegie Mellon University November 10, 2015

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My background

- Currently the Multimedia Designer & Video Director for the Robotics Institute @ Carnegie Mellon University (since 2002)
- Currently teaching "Writing for Multimedia" at CMU
 Students write, create graphics and sound and animate/composite
 (since 2010, offered in the fall)
- Created and taught a Prototyping & Videosketching course in the CMU School of Design (2010-2014)
- Teach several filmmaking, lighting, animation courses at Pittsburgh Filmmakers & Center for the Arts (since 2000)

My back-background

- Freelance interactive & video design while at CMU: 2003-2010
- Agency experience (Brady Communications) 1999-2002
- NYU Tisch School of the Arts, Film & Television Production 1994-1998
- Foundation in narrative filmmaking collided with the explosion of the World Wide Web and demand for interactive multimedia
- In the early 90s, shot and edited music video experiments, began creating interactive media with HyperStudio, wrote and recorded sketch comedy for radio

Sample Video Styles

- Document / Talking Head + B-roll: Project Birdhouse / Ballbot
- Explainer Animation: How reCaptcha Works
- Narrative Filmmaking: Lighting Fundamentals samples
- All found here: https://stasarama.wordpress.com
- And here: <u>stasaramastudents.com</u>

filmmaking is

creative/technical

writing
visual design
sketching
planning

composition
direction of camera
direction of subjects
control camera movement

cinematography
knowledge of camera lenses
control depth of field
creative use of natural light
technical control of artificial light

film language

team mangement task delegation

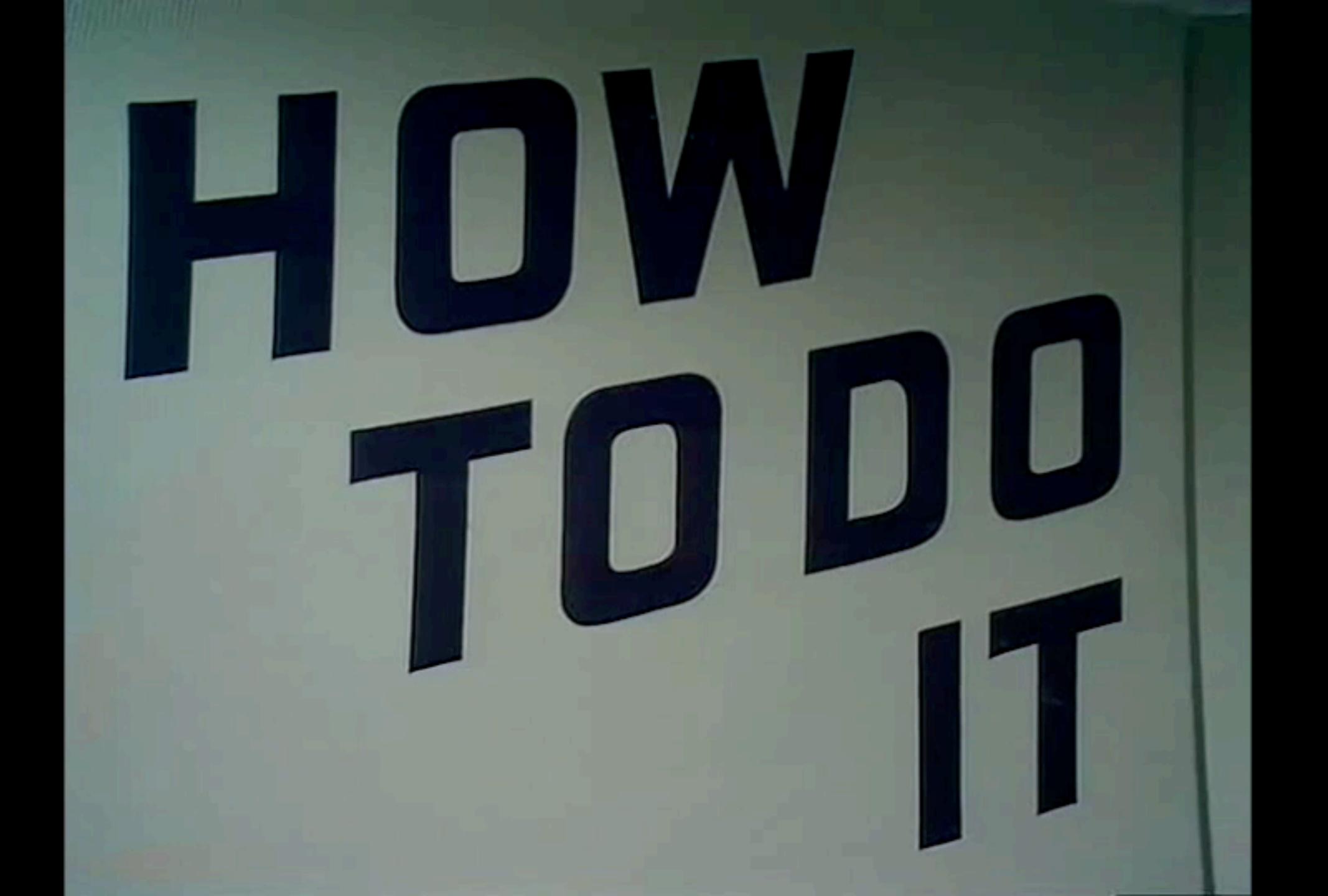
audio recording narration vs live synchronizing audio audio editing audio mixing

image control saturation white balance color temperature

editing transitions screen direction

title design
graphic production
motion graphics
animation
compositing
keyframe animation

video frame rates video frame sizes knowledge of codecs rendering strategy



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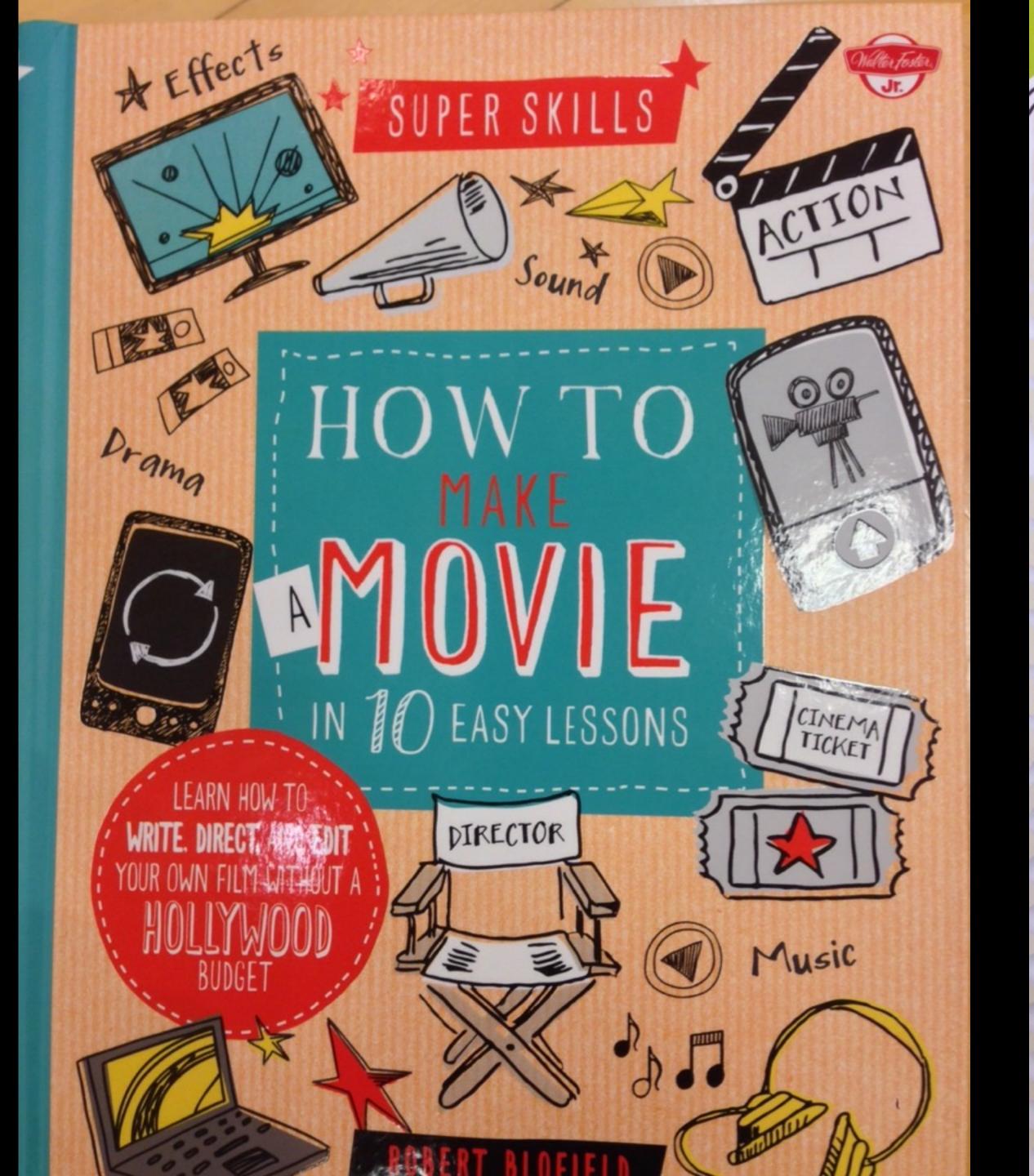
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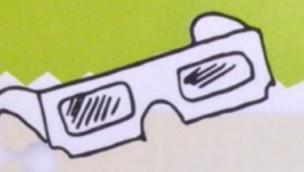
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MUVING SHUIS

Now that you know the basics about cameras, let's talk about shots. We've discussed what certain shots look like and how you go about creating them, but the ones you've looked at so far are all static. This means that the camera doesn't move. To make your film look more interesting—and more professional—you'll need to get your camera moving. There are three main ways to do this.

Shot 1: THE PAN

WHAT IT IS: Panning is what we call the camera motion when we move horizontally across a scene.

HOW TO DO IT: If you were to stand still and film a scene while carefully moving the camera from left to right, you would be "panning" through the scene. You can also use this technique to pan in time with a character's movements to better follow them through the scene.

THE EFFECT: This shot gives a little more information about the setting than a static (non-moving) shot.

HANDHELD OR TRIPOD: Either is fine, as long as the camera operator stays stationary and simply turns the camera left to right or vice versa.



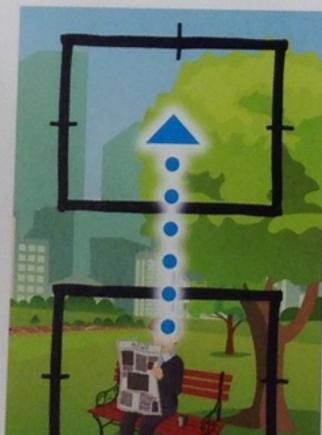
Shot 2: THE TILT

WHAT IT IS: Tilting is simply the vertical version of panning.

HOW TO DO IT: The camera operator stays stationary while the camera is tilted up and down toward the sky or ground.

THE EFFECT: This shot is most notably used for creating high and low angle shots.

HANDHELD OR TRIPOD: Either is fine.



Shot 3: THE ZOOM

WHAT IT IS: A zoom is when the image appears to become larger or smaller, depending on whether the camera is zooming in or out.

HOW TO DO IT: This is a feature built into all video cameras. The camera is held in one position during the zoom.

THE EFFECT: This technique can be used to show the importance of an event or item and to help guide the viewer's attention.

HANDHELD OR TRIPOD: Either is fine, though it works best when the camera is held steady, such as on a tripod.

"WOW" FACTOR!

MANY STUNTS ARE FILMED BY MOVING THE CAMERA VERY FAR AWAY FROM THE ACTOR AND ZOOMING ALL THE WAY IN. THIS MAKES THE ACTOR LOOK MUCH CLOSER TO THE BACKGROUND THAN THEY ACTUALLY ARE. EXPLOSIONS AND CAR CHASES CAN THEN BE FILMED A SAFE DISTANCE FROM THE ACTOR BUT APPEAR TO BE VERY CLOSE TO THEM ON SCREEN.





SOME CAMERAS HAVE FISH-EYE MODES
THAT ALLOW THEM TO ZOOM OUT TO
ULTRA-WIDE SETTINGS. RESULTING IN A
DISTORTED CIRCULAR IMAGE.

ADVANCED ZOOMING

By zooming into an image you slightly distort its shape. When fully zoomed out, the edges of your image can be a bit circular. When you zoom in you remove this circular effect and flatten the image. In a nutshell, you make the background look bigger when zooming out and smaller when zooming in. You can use this to set up interesting shots.

"Does the team demonstrate confident, effective storytelling?"

Confident, Effective Storytelling

- clear, vivid communication to appropriate audience
- high production value, consistent style
- appropriate design, visual flow
- clean audio, sharp camera work
- original, creative
- fascinating to watch, connects with audience

Vision

- Style? What style fits the personality of your team? Your idea?
- Stand out: Be creative, unique and honest.
- Be careful of being too gimmicky.
- Your video shouldn't look and sound too much like someone else's.
- Avoid the echo chamber or straight up templates. A template is great... until a VC sees it for the second time or worse - a third.

Conceptualize, Sketch Pre-Production Production Post-Production

Brainstorm, Clarify Message Write, Plan & Schedule Make & Gather Materials Edit and Mix the Materials

Script

- Write, read out loud, record it, listen to it, rewrite, repeat
- Write a multi-column audiovisual script
- Precise, efficient, clear message
- Appeal to the mind and heart of audience
- The pace, rhythm and other information will dictate word cap
- 150 words per minute is a good starting point

3 column script + storyboard

Script

Title: Project Title Client: Client name(s)

Time	Visual	Audio
0:00		
0:02	Descriptions of imagery, image/camera movement, style of animated of type over time.	Narrator: Music: SoundFX:
0:05	Includes type that is seen, but not spoken.	
0:10		
0:20		
0:30		

PAGEOF						

Visualize

- Simple storyboard sketches can be great planning tools
- Take advantage of the moving, visual medium
- Will you shoot video? Use photos creatively? Hand drawn or vector drawings? Stop motion?
- Animation? Motion graphics? Dynamic typography? A composite of all of these elements?

- How to visualize the key points of your business plan?
- Visual metaphor or theme to tap into?
- Will audience hear voice-over narration or see on-screen talent?
- Record scratch track, make super rough animatic



film language

Control (Production)

- framing of shot, movement of camera
- proximity of microphone, placement of camera
- lighting, placement of subject
- camera: focus, exposure, white balance, depth of field
- level of microphone to record audio
- location cleanup, arrangement, clothing and prop color

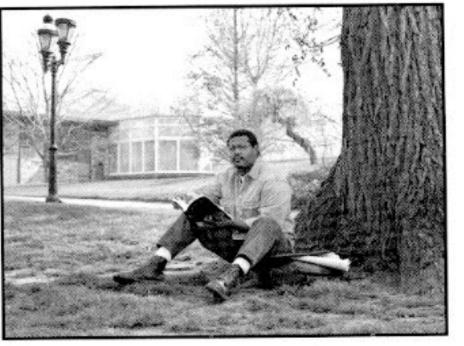
Shot Sizes and Continuity

- Language of shot sizes: ECU, CU, MS, LS, ELS
- Maintaining screen direction is important
- The "eye-line" of a character, camera placement, composition and common sense ideas like left=west and right=east all establish screen direction
- 180° Degree Rule See following slides
- Upcoming images courtesy of "Shot by Shot: A Practical Guide to Filmmaking" by Cantine, Lewis and Howard

Extreme Long Shot (ELS)



Extreme Long Shot (ELS)

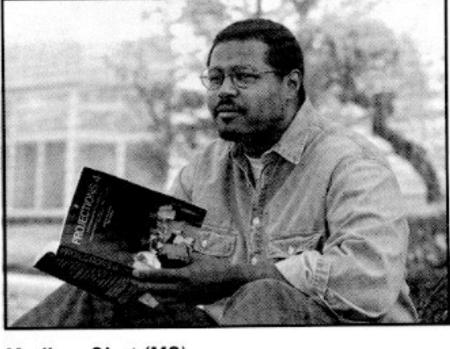


Long Shot (LS)

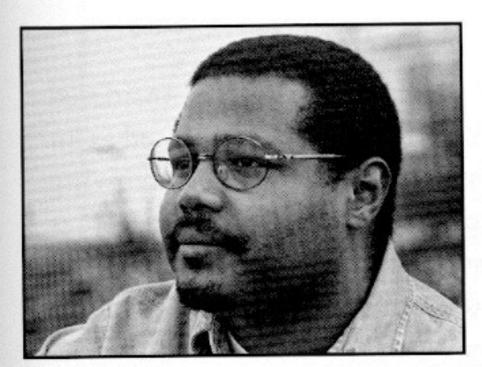
Medium Shot (MS)



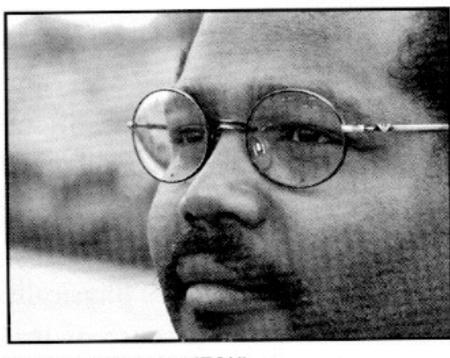




Medium Shot (MS)



Close-Up (CU)



Extreme Close-Up (ECU)

Long Shot (LS)

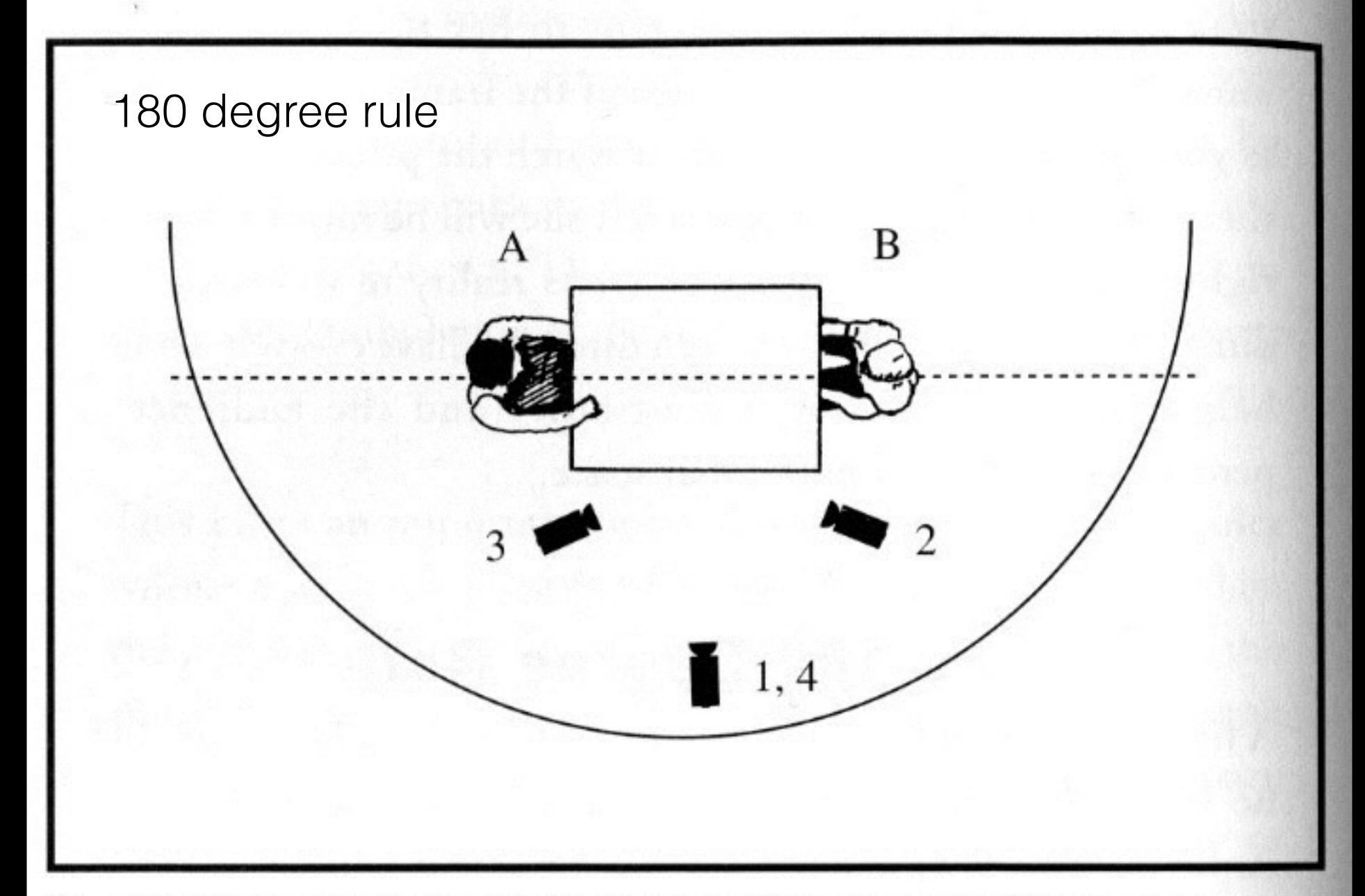
Shot Sizes

ELS, LS

MS

CU, ECU

Extreme Close-Up (ECU)



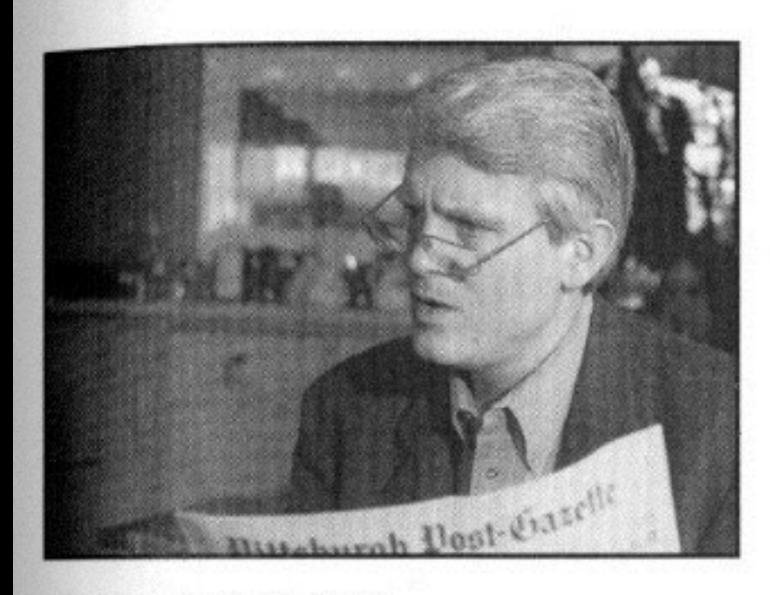
An overhead view showing the 180-degree line and three camera positions for a sequence of four shots. The numbers indicate the order of the shots in the edited sequence.



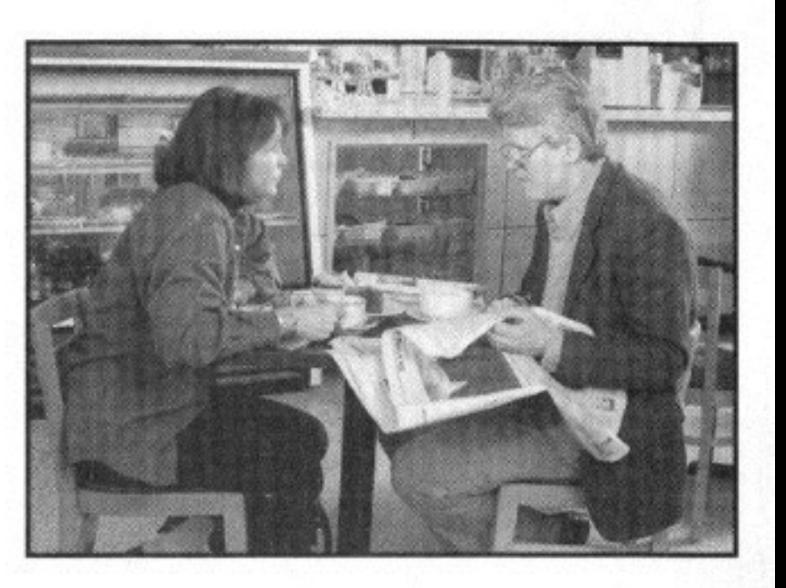
1. MS, both characters



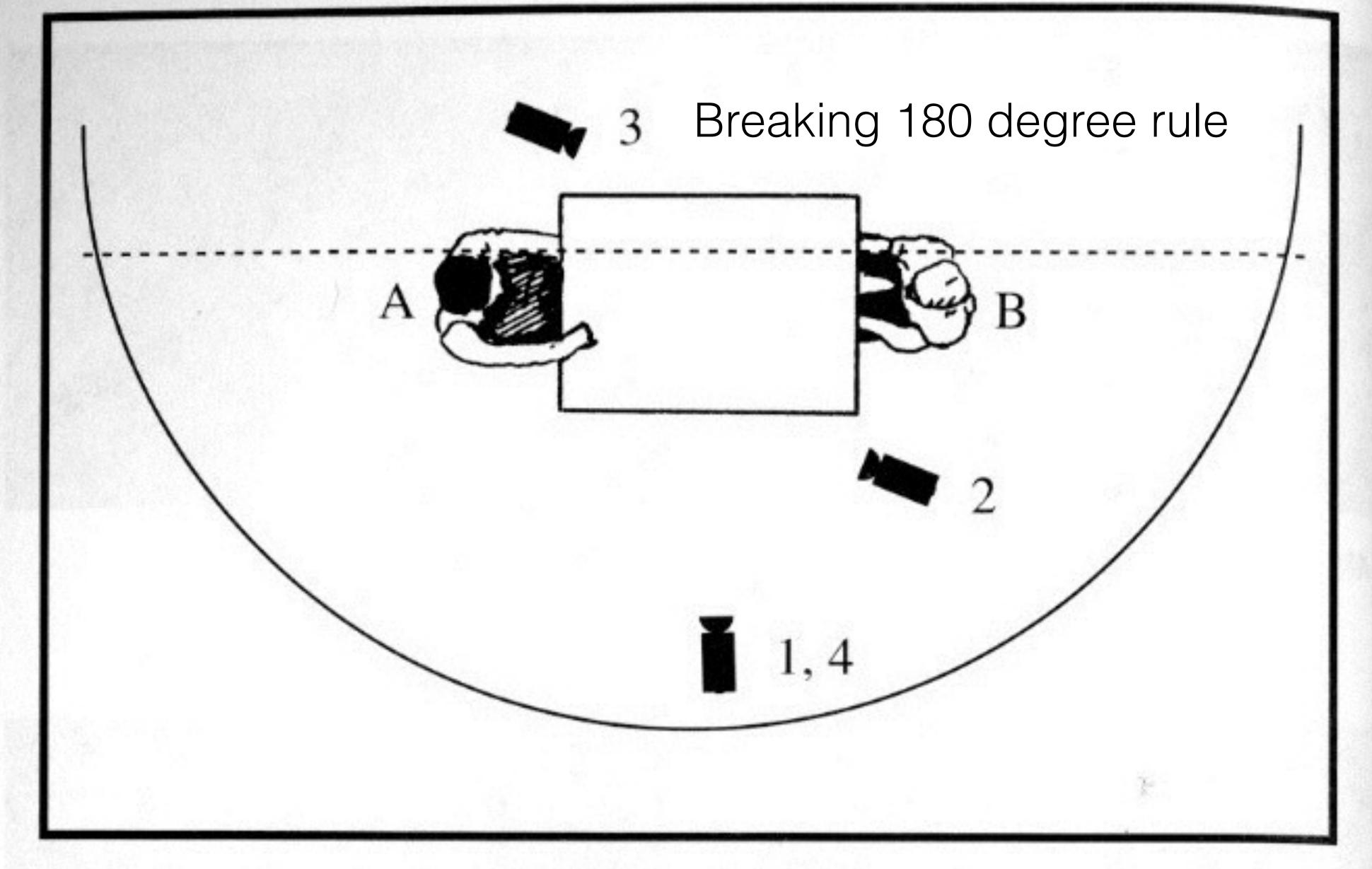
2. CU, character "A"



3. CU, character "B"



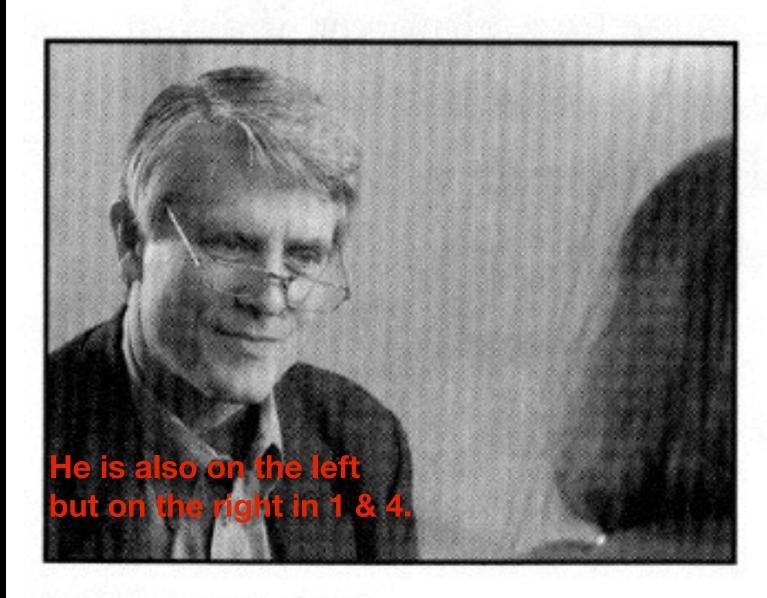
4. MS, both characters



An overhead view showing the 180-degree line and three camera positions for a sequence of four shots. Camera position 3 is on the wrong side of the 180-degree line.



1. MS, both characters



3. CU, character "B"



2. CU, character "A"

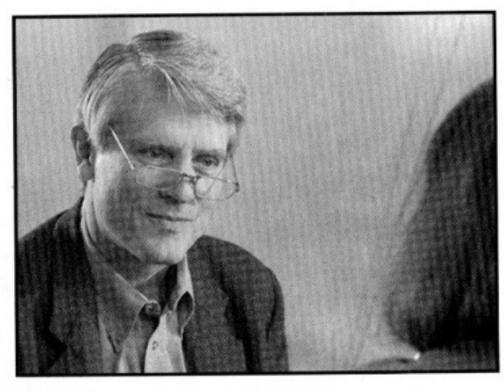


4. MS, both characters

The resulting sequence of shots when breaking the 180-degree rule. In shot 3 character "B" is facing screen right, while in shots 1 and 4 he is facing screen left.



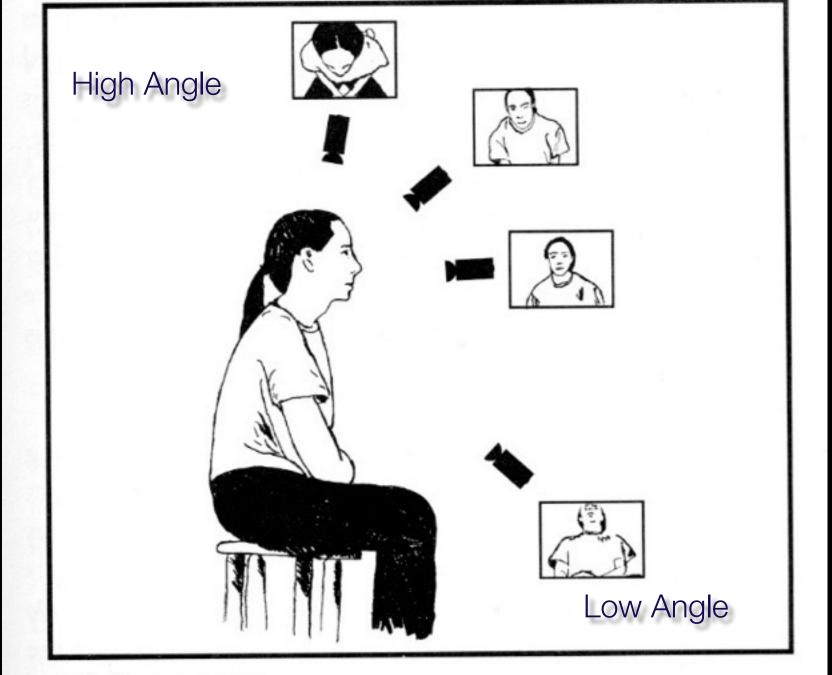




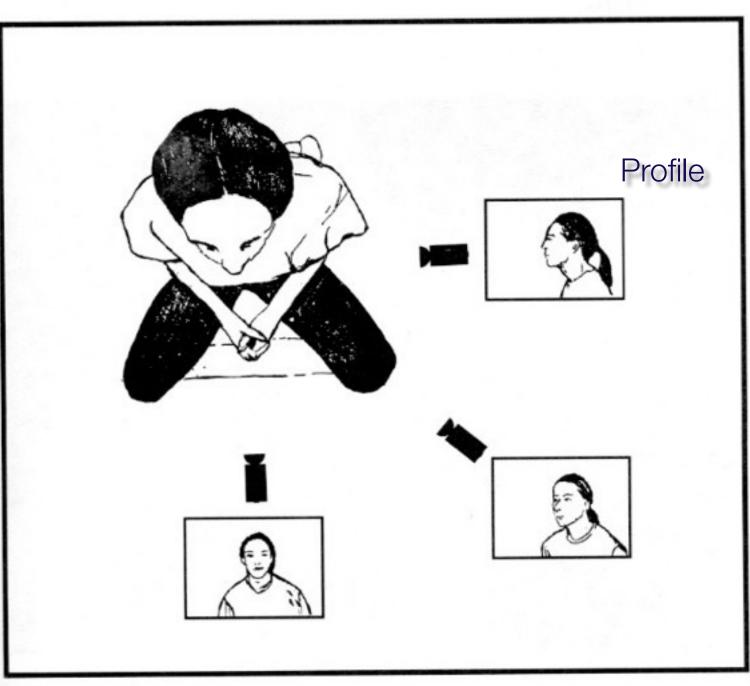
Two shots separated by a cutaway shot.

Using a cutaway to correct a continuity error

Camera Angles



Vertical camera angles



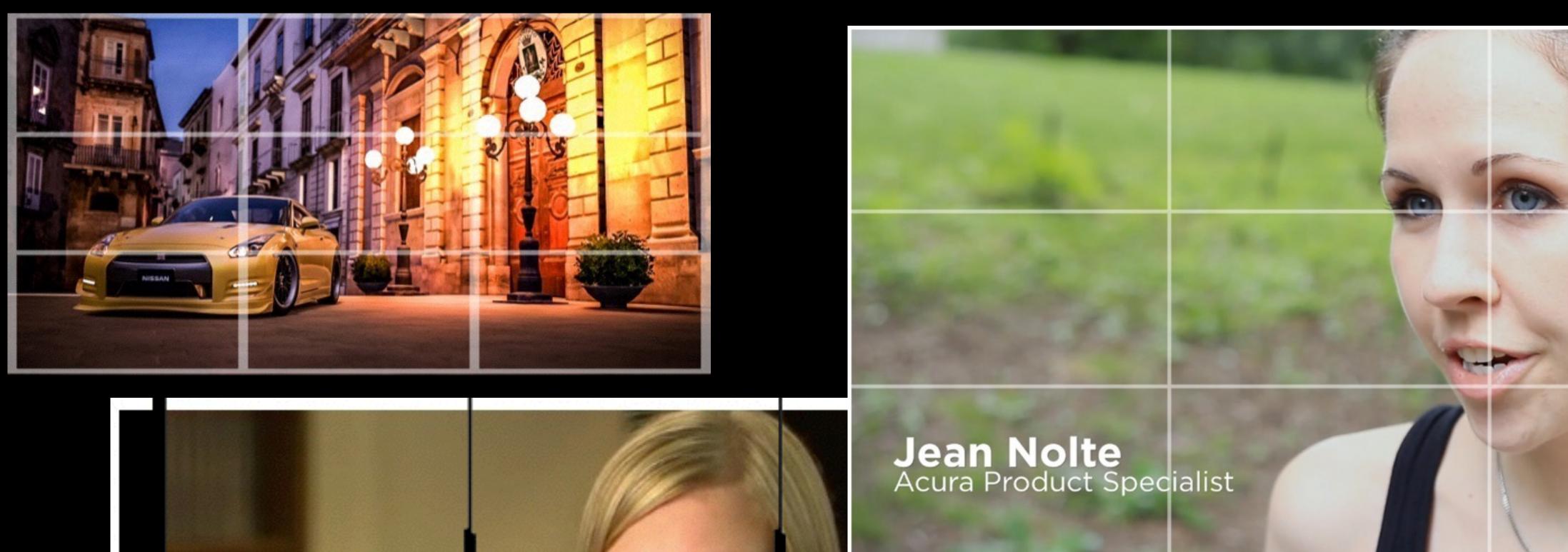
Horizontal camera angles

FilmicPro and other iPhone Tricks

- iPhone video camera app that gives more **control** to lock white balance, focus and exposure
- Wistia: http://wistia.com/library/shooting-video-with-an-iphone
- All of these videos on this page are great, but the one I meant to show during my talk was the "Behind the Scenes" midway down: http://www.appsumo.com/wistia-iphone/

Composition

- Aspect Ratio (width : height)
- Composing within a 16:9 frame
- Typical HD video frame sizes: 1920x1080 or 1280x720 (These will increase over time, but good for years to come.)





Rule of Thirds

a basic composition guide



Rule of Thirds vs. Symmetry

- Rule of Thirds: https://vimeo.com/1461280
- Centered/Symmetrical: Wes Anderson https://vimeo.com/89302848

clean, clear audio



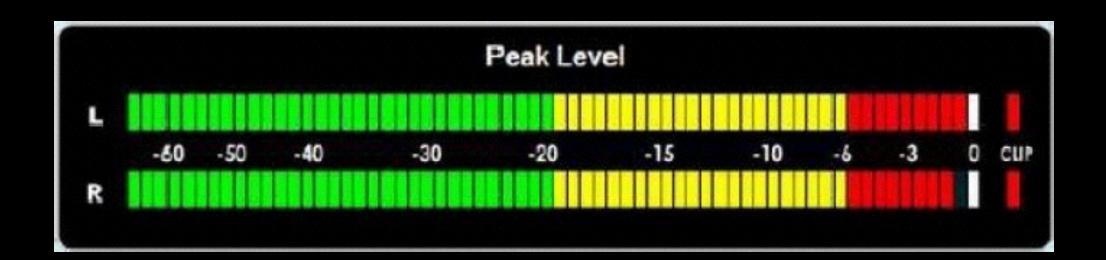


Recording Audio

- The goal is to record clean audio with proper volume level
- Use a boom or mic attached to a stand above talent
- •Record in a quiet environment free of echo and noise or in an environment similar to the one being portrayed
- Use blankets, rugs and cushions to dampen echo if necessary
- •For narration, a close sounding perspective can work
- •For dialogue between actors some distance from the mic can achieve a natural feel to the recorded voice

Recording Audio (cont'd)

- Recording digital audio: Audacity (Free), GarageBand, Voice Memos (iOS Phone/ Tablet)
- Use the VU meter to ensure the audio being recorded is not too quiet or too loud
- Digital audio VU meters use -12 dB as a "sweet spot"
- Digital audio "clips" when the recorder is overwhelmed by signal Avoid clipping at all costs! Team member should wear earbuds and monitor audio being recorded.
- Uncompressed audio WAV or AIFF vs. high quality mp3 or m4a:
 44.1 or 48 KHz 16-bit audio
 160kbps or better compressed



- How to get best narration track from an iPhone
- Using a double system with 2 iPhones, or iPhone as boom mic see the Wistia video below
- Wistia: http://wistia.com/library/shooting-video-with-an-iphone

Lighting Properties to Control

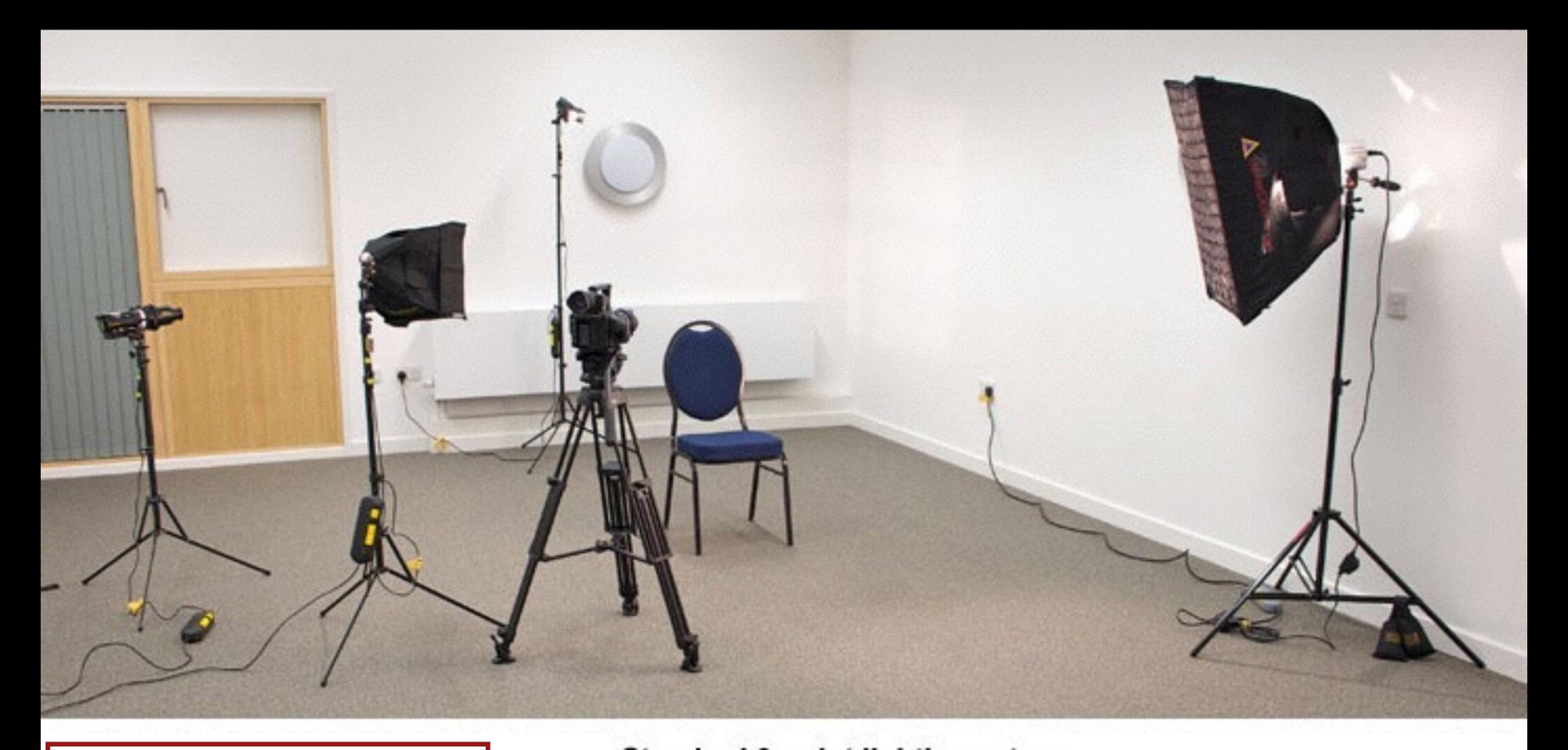
- Intensity Dark ----- Bright
- Hard ----- Soft
- Contrast High ----- Low
- Shadows and Highlights
- Directions and Angles, Number of Sources
- Color (use the same bulb type)
- Low Key
 Low Key





Contrast Ratios, Hard/Soft, High/Low Key

- http://nuatexperiment.wordpress.com/2011/06/16/lizscinematography-101-quality-of-light/
- The link above reviews Contrast Ratios, but also some other specifics like low/high key looks, and hard/soft light quality



But, as you saw from Wistia demos, an even frontal illumination with a background light behind subject works for *their* style.

Standard 3-point lighting set up.

Lights from left to right:

Background light with projection lens and gobo.

Fill light with mini soft box.

Back light (against back wall).

Key light with soft box.

How much drama?

- Bright, low contrast, high key is often the goal for filming your team
- A dramatization of product or service may call for a more cinematic approach to lighting... more shadows & contrast, lower key

What if I don't have a light kit?

- Be creative with other inexpensive light sources (work light + diffusion material or bounce light off of white wall)
- Use bounce white cardboard to fill in shadows, decrease contrast
- Use common sense approach to natural light: face window, not backlit. Turn off overhead sources that hurt more than help!
- Wistia: http://wistia.com/library/down-and-dirty-lighting-kit
- Wistia: http://wistia.com/library/choosing-a-background

Assemble

Control Audience Focus with Editing

- editing: visual flow and rhythm
- transitions
- audio mixing/editing: audio tracks, music
- Good visual editing & audio mixing removes or avoids distractions
- Audience is hearing, seeing, reading, thinking... all at once.
 Guide that experience.

Video Editing Software

- Import video, photo and audio files: Media Bin
- Cut, expand, contract media clips: Timeline Window (upper)
- Synchronize voice, sound effects, mix: Timeline Window (lower)
- Virtual razor blade, tape, overlap: Transition Details
- Timing is everything: Source and Edit Windows
- Demo Final Cut Pro X vs. ScreenFlow vs. iMovie

Music

- Choose carefully. Does music support tone and message?
- Music should be dropped in volume in your editing software as to not be too loud or drown out narration or other information
- In techincal terms, I typically reduce audio by -12 dB while often boosting spoken audio by +1 or +2dB

Animation & Compositing

- Workflow is similar to video production. Pre/Prod/Post
- Graphic Production (create or manipulate graphics)
- Graphics can be pixels (photo) or vector art (illustration)
- Elements are layered and moved via keyframed properties
- Adobe After Effects vs. ScreenFlow
- Show video of using Keynote or PowerPoint to build elements http://blog.salsify.com/ultimate-toolkit-creating-animated-marketing-video-100-less

Key Takeaways

- Write something fresh. Avoid cliché or overdone concepts.
- Stablize your camera, movement should flow nicely (not distract)
- Audio that is clear, well recorded and precisely delivered is critical
- Vary shot sizes, use interesting angles, create graphic visual breaks
- Be creative with the tools you have... Including CMU Lending cameras, recorders, microphones and CMU Cluster Software But, there may be a need to buy or rent a simple lighting kit.

Resources

- FreeMusicArchive.org
- http://wistia.com/library
- ScreenFlow (Mac) http://www.telestream.net/screenflow/overview.htm