
Using camera

Shot:

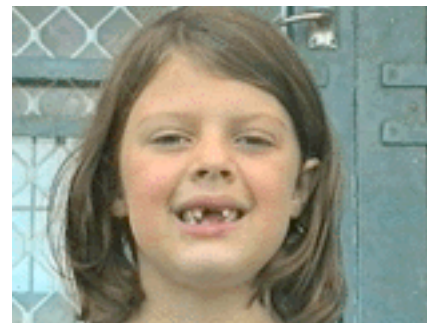
- A shot is basically from when you press record to when you stop recording

Framing & Composition:

- The frame is the picture you see in the viewfinder
- Composition refers to the layout of everything within a picture frame — what the subject is, where it is in the frame, which way it's facing/looking, the background, the foreground, lighting, etc.
- When you "frame" a shot, you adjust the camera position and zoom lens until your shot has the desired composition.

Different types of camera shots

- VWS (Very Wide Shot)
 - Shows the subject's environment.
- WS (Wide Shot)
 - Shows the whole subject.
- MS (Mid Shot)
 - some part of the subject in more detail.
- CU (Close Up)
 - Shows a feature of the subject.



Some shot techniques include

- **Wide shot:** Allows the audience to see a large area. Called an establishing shot when used to establish location.
- **Close-up:** Shows details such as facial expressions.
- **Extreme close-up:** So close it may take the audience a moment to figure it out; provides striking visual detail.
- **Trucking shot:** Moves with the action.
- **Cutaways:** Help with jump cuts to distract the audience from the edit and smooth the transition between edited sequences, such as crowd reaction or the scoreboard at a sporting event.
- <http://www.youtube.com/watch?v=TuGvRu5N9v4>

Transition:

- Shots are linked (edited) in a sequence to tell a larger story by a transition.
- Usually this is a simple cut, in which one shot changes instantly to the next.
- A moving shot (e.g. pan) can also be thought of as a transition from one shot to a new one.
- The transition is very important in camera work, and you need to think constantly about how every shot will fit in with the ones before and after it.
- The key is not so much how the transition is achieved technically, but how the composition of each shot fits together.

Important terms

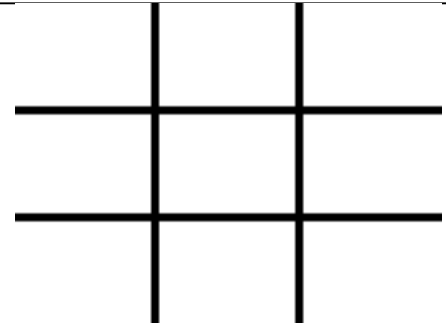
- Pan
 - Side-to-side camera movement.
- Tilt
 - Up-and-down camera movement.
- Zoom
 - In-and-out camera movement (i.e. closer and more distant).
- White balance
 - Adjusting the colours until they look natural and consistent.

Some Rules of Framing

- Look for horizontal and vertical lines in the frame (e.g. the horizon, poles, etc).
- Make sure the horizontals are level, and the verticals are straight up and down

The rule of thirds.

- This rule divides the frame into nine sections
- Points (or lines) of interest should occur at $1/3$ or $2/3$ of the way up (or across) the frame, rather than in the centre.
- The rule of thirds divides a frame into nine sections.
 - The sky takes up approx. $2/3$ of this frame.
 - The eyes are placed $1/3$ down the frame.
- <http://www.youtube.com/watch?v=GjFUGAV2dqM>



"Headroom", "looking room", and "leading room".

- Amount of room in the frame which is strategically left empty.
- There is empty space for the subject to move into. There is empty space for the subject to look into.
 - The shot of the baby crawling has some leading room for him to crawl into,
 - The shot of his mother has some looking room for her to look into.
- Headroom is the amount of space between the top of the subject's head and the top of the frame.
 - A common mistake: too much headroom, which doesn't look good and wastes frame space.
 - In any "person shot" tighter than a MS, there should be very little headroom.



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- Everything in your frame is important, not just the subject.
 - What does the background look like?
 - What's the lighting like?
 - Is there anything in the frame which is going to be distracting, or disrupt the continuity of the video?
 - Pay attention to the edges of your frame.
 - Avoid having half objects in frame, especially people.
 - Also try not to cut people off at the joints — the bottom of the frame can cut across a person's stomach, but not their knees.

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- Think about the best way to convey the meaning of the shot.
 - If it's a baby crawling, get down on the floor and see it from a baby's point-of-view (POV).
 - If it's a football game, maybe you need to get up high to see all the action.
 - Look for interesting and unusual shots.
 - Most of your shots will probably be quite "straight"; that is, normal shots from approximate adult eye-level.
 - Try mixing in a few variations. Different angles and different camera positions can make all the difference.
 - For example; a shot can become much more dramatic if shot from a low point.
 - Be aware that looking up at a person can make them appear more imposing, whereas looking down at a person can diminish them.

Basic Camera Moves

- Pan: The framing moves left & right, with no vertical movement.
- Tilt: The framing moves up & down, with no horizontal movement.
- [Pan and tilt](#)
- Zoom: In & out, appearing as if the camera is moving closer to or further away from the subject. (x moving the camera in and out.)
 - When a shot zooms in closer to the subject, it is said to be getting "tighter".
 - As the shot zooms out, it is getting "looser".
- Follow: you follow the action whilst walking.
- Combination of these basic moves.
 - For example, when you're zooming in, unless your subject is in the exact centre of frame, you'll have to pan and/or tilt at the same time to end up where you want to be.

Shooting Technique

- Position yourself and your camera.
- If you're using a tripod, make sure it's stable and level (unless you have a reason for it to be tilted).
- If you're going to be panning and/or tilting, make sure that you'll be comfortably positioned throughout the whole move.
- You're better off finding the position which is most comfortable at the end of the move

If you're using a tripod

- Make sure you're comfortable with your tripod, with enough room to move around.
- Stand close to the tripod between two of the legs.
 - The left hand controls the focus, exposure and zoom
 - Right one moves the handle of the tripod
 - Some operators prefer not to use the handle and instead place their right hand on the camera.



Plan the Move

- Before you begin a move such as a pan or tilt, plan it first.
- Figure out the best standing position which allows you to complete the whole move comfortably.
- It is usually much better to finish the shot in a comfortable position than to start comfortably and finish awkwardly.
- Frame up the end of the shot first and get yourself comfortable, then stretch yourself to get the starting point of the move.
- Check that the framing still looks level as you pan - it may be okay in one direction but become horribly slanted as you pan left and right.

If you're not using a tripod

- Stabilize yourself and your camera as best you can.
- Keep your arms and elbows close to your body (you can use your arms as "braces" against your torso).
- Breathe steadily.
- For static shots, place your feet at shoulder width (if you're standing)
- Or try bracing yourself against some solid object (furniture, walls, or anything).
- [Basic hand-held camera technique](#)

Frame your shot.

- Then do a quick mental check:
 - framing (vertical and horizontal lines, background, etc.)
 - Lights
 - Think about your audio.
 - Audio is just as important as vision

Press "record".

- Make sure that you are actually recording.
- "roll-in time": delay between the time you press record and when the camera begins recording.
- Keep checking the status displays in the viewfinder.
 - Learn what all the indicators mean — they can give you valuable information.
- Use both eyes.
 - A valuable skill is the ability to use one eye to look through the viewfinder, and the other eye to watch your surroundings.



Motion Tips

- **Handheld Camera Movement**
- Consumer camcorders are small nowadays - hard to keep steady
- There are two things that, if added to a camera, will immediately reduce jitter
 - good old fashioned **weight**,
 - **lowered center of gravity**.
 - The quickest and probably the most readily available method you can use to get both of these things is to attach your camera to a tripod, and then fold up the legs.



- **High Angle Shots**

- A ladder, stool, treehouse, or the top of your neighbor's car (while they're out, of course) are all great places to get **high-angle** shots from.

- **Low Angle Shots**

- the closer you can get to the ground, the better.

- **Dolly/Truck Shots**

- A skateboard
- A wheelchair
- Car
- Sporting equipment such as bicycles or rollerblades could prove useful
 - noise level may be prohibitive for some applications.

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- Shooting whilst walking backwards
 - Learn to walk backwards.
 - Have someone place their hand in the middle of your back and guide you.
 - Keep thinking "Framing...Audio..."
 - As long as you're recording, think about how the frame composition is changing, and what's happening to the sound.
 - Press "record stop" before moving.
 - wait until one second after you've finished recording

Additional advice

- Be diplomatic while shooting.
 - Remember that people are often uncomfortable about being filmed, so try to be discreet and unobtrusive
 - for example, you might want to position yourself some distance from the subjects and zoom in on them, rather than being "in their faces".
- Many people find the red recording light on the camera intimidating, and freeze whenever they see it.
 - Try covering the light with a piece of tape to alleviate this problem.
- Learn to judge when it's worth making a nuisance of yourself.
 - If it's an important shot, it might be necessary to inconvenience a few people to get it right.
 - But if you're going to make enemies over something that doesn't matter, forget it and move on.

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- Use the "date/time stamp" feature sparingly.
 - If you must have it there, bring it up for a few seconds, then get rid of it.
 - Be prepared to experiment. Think about some of the things you'd like to try doing, then try them at a time that doesn't matter
 - [Seven deadly sins of Camerawork](#)

Lighting

- natural light (from the sun) or artificial lights
- First and foremost you need enough light.
 - the quality of the light and how the various light sources combine to produce the image.
- If you have clashing light sources
 - (e.g. artificial interior lights with sunlight coming through the windows), you may find the colours in your image appear unnatural.
 - It's best to control the light sources yourself if possible (e.g. turn off the lights or close the curtains).

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- When moving between locations, think about what light source you are using.
 - If you move from an outside setting to an inside one with artificial lights, the amount of light may seem the same but the colour temperature will change according to the type of lights.
 - In this case you need to white balance your camera for the new light source.
 - <http://www.youtube.com/watch?v=GjFUGAV2dqM>
<http://www.youtube.com/watch?v=Hiv03qRp9pM>