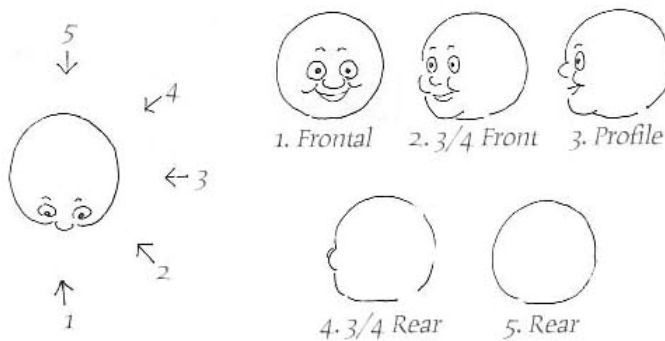


# Camera Angles and Movements

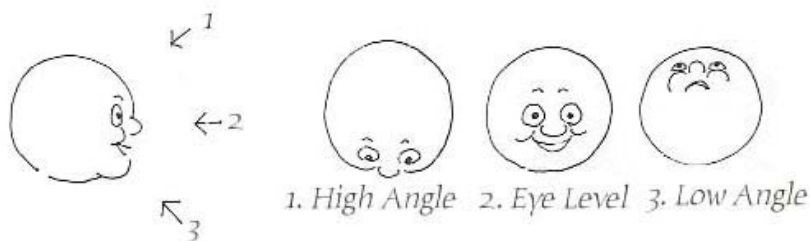
**Camera Angles:** *These change the appearance and function of your shot.*

**Horizontal camera angles:** Moving the camera around the subject horizontally while aiming at the subject creates different camera angles below:



1. **Frontal.** The frontal angle tends to flatten the three dimensionality of facial features and environments.
2. **Three-quarter front.** The three-quarter front angle is more often used than the frontal angle or profile because it shows more depth and volumes.
3. **Profile.**
4. **Three-quarter rear.**
5. **Rear.**

**Vertical camera angles:** Moving the camera around the subject vertically while aiming at the subject creates different camera angles below:



1. **High angle.** The camera is placed above eye level, looking downward. A high angle shot can make a character look smaller, younger, weak, confused, or more childlike.
2. **Eye level.** Most commonly used.
3. **Low angle.** The camera is placed below eye level, looking upward. A low angle shot can make a character look bigger, stronger, or nobler. It also gives the impression of height.



high angle



low angle

The images are from "The Art of Technique: An Aesthetic Approach to Film and Video Production" by John Douglass and Glenn Harnden

Note: Beware of the **Jump** cut

When cutting from a shot to another shot with a different camera angle (e.g, from a frontal shot to a three quarter front), framing the same subject, the difference between the two camera angles must be greater than 35 degrees. If the difference is less than 35 degrees, and the appearance of the subject does not change sufficiently, you will get the unpleasant effect of an indecisive cut and the audience will perceive it as a mistake or a distraction.

## Two shot & over-the-shoulder shot

- **Two shot** shows two characters.
- **Over-the-shoulder shot** is a close-up of a character as seen over-the-shoulder of another person in the foreground.



Two shot

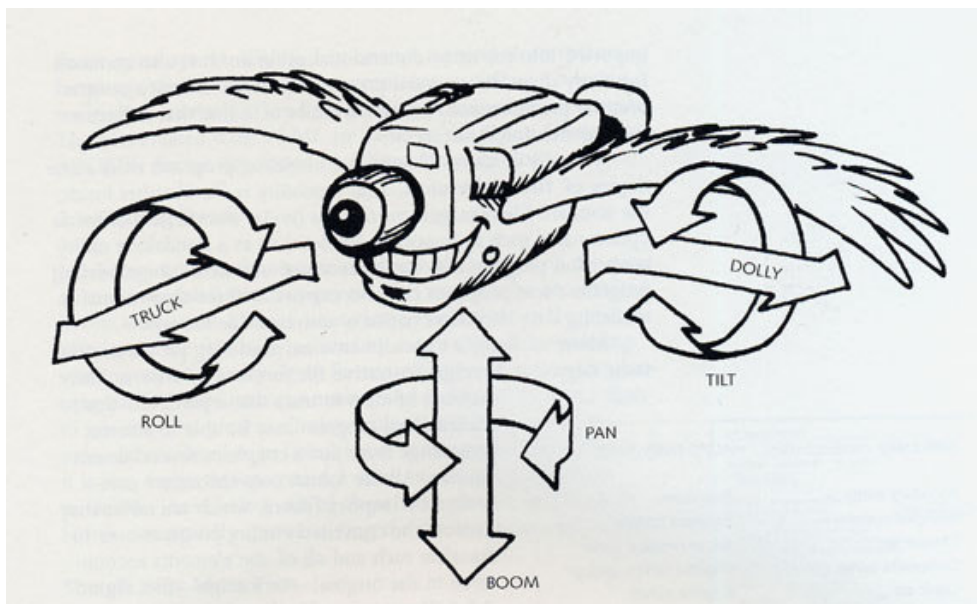


Over the shoulder shot

## Camera Movements - Dynamic shots:

The camera position is often animated in computer animation for no good reason or no reason at all simply because the virtual camera can be moved easily. If you want to animate realistic and effective camera moves to create dynamic shots, study popular types of possible **camera moves** with a real camera. Try the following:

- **Pan.** The camera rotates from side to side, so that it aims more to the left or right. The camera does not change the location.
- **Dolly.** The camera's actual position changes, such as to move alongside a moving subject or to travel closer to a character during a scene.
- **Tilt.** The camera rotates to aim upward or downward without changing the location. Tilt is sometimes called "**pitch**".
- **Boom.** The camera travels up and down.
- **Zoom.** The camera's lens is adjusted to increase or decrease the camera's field of view, magnifying a portion of the scene without moving the camera.
- **Dolly in** moves the camera closer to the subject. **Dolly out** backs the camera away from the subject. Dolly in and dolly out are sometime called "**truck**".



The image is from "The Art of 3-D Computer Animation and Imaging" by Isaac Kerlow.

### **Dolly vs. Zoom**

When you dolly, you are moving the camera in space, while a zoom refers to changing the camera's focal length.

When you move the camera, the perspective changes. Objects far from the camera change in relative size at a slower rate than objects which are close to the camera. That is what you see through your human eyes as you walk around, your perspective changes. On the other hand, when you zoom (i.e., when you change the focal length of your camera), your camera does not move and perspective does not change.