

Vocabulary of terminology and concepts

While some of these terms seem very obvious, it is good to ensure a general understanding in order to guarantee clear communications between crew members

Basic moves from a tripod, handheld camera or motion control rig etc. Each move has a purpose and provides a visual effect that a filmmaker can employ as a story telling technique. But should be done for a reason. Understanding the benefits of each allows the camera operator to enhance their visual techniques, often combining multiple moves in one shot. For example combining a pan & tilt, slide & tilt.

 Pan: moving the camera left / right around a central point. Often used to follow a subject or reveal a subject 	
Tilt: moving the camera orientation up or down around a central axis. Often used to follow a subject or reveal a subject	
• Pedestal : moving the camera up or down with a fixed x/y axis. Often used to follow a subject or reveal a subject. Best used with foreground elements that the camera passes, so the audience gets a sense of the move, otherwise can look like a tilt	
• Push or pull: moving the camera forward or backwards. Often used to follow a subject or reveal a subject. The term is also used when changing frame size with a zoom lens. The visual effect is different as a slider / dolly move often involves the camera moving by foreground elements and gives more a sense of traveling. Zooming simply alters framing but can emphasize or reveal a subject	

• Dolly or slide: moving the camera left or right. Often used to follow a subject or reveal a subject. Can be a move of just a few inches or go for many yards. Also best used with foreground elements to give a sense of parallax (everyday example of parallax is seen driving on a road-- trees near the road seem to zoom past quickly, while trees in the distance appear to slowly drift by)



• **Dutch angle**: moving the camera's horizon of the vertical axis



In addition to these terms, another important one is a **wipe**. This is typically used when a camera moves by an out of focus foreground object, while tracking a subject. Perhaps tree trunks as you track sideways through a forest, following a person. It is one of the best ways to show the camera is moving through an environment. The wipe also shows the other element of a tracking shot that makes it different from a simple pan or tilt, as objects that are closer to the camera move at a different speed to those far away, this is known as **parallax**.

The 8-8-8 rule: I often hold a shot for 8 seconds, make the move (which is likely 8 secs, but could be longer) and hold a shot for 8 seconds once the move is completed. This provides the editor with at least three options 1) One long shot 2) Two static shots from each end of the take 3) Or just the move Its all about giving the editor options

Equipment used to support moving cameras

These are the main pieces of gear used to create camera movement, often used in combination.

• Tripod : The standard support which comes in many variations of height and four standard top mounts (75mm, 100mm, 150mm bowls and Mitchell mount which is a flat base). The bowl mount allows for the head to be leveled to ensure a level horizon	
Fluid head: Dampened pan and tilt that provides smooth camera movements. Available in the three standard bowl sizes and weight rated according to the camera to be supported	
Geared head: A variation on the fluid head, controlled by two cranks to create movement. Excellent for large camera builds but take a lot of practice to use	ARRI CO
Hi hat: Basically the shortest of tripods for low level shooting but also for mounting rigs on dollies, car rigs etc	

• Monopod: A mobile support for on the move shooting where a tripod is inconvenient but the operator wants a steadier shot than hand-held, especially when shooting for extended periods. Also great for high angle shots, in hard to reach locations, or low angle when inverted. Makes an excellent combination with a small single handed gimbal, allowing you to make steady crane moves while staying mobile



• **Slider**: Available in many lengths from a few inches to several feet, allows for smooth sliding shots when the camera is oriented looking at 90° from the axis, or a push/pull when the camera is oriented parallel to the axis. May be hand driven or motorized for repeatable moves or timelapses. Generally mounted on a tripod or table-top. Mostly straight, but also available in curves. A motorized version can generally be programmed in a continuous motion to run back and forth in a situation like an interview to add a dynamic element to shots. Generally the carriage and track are an integrated unit



 Dolly: Used to create similar moves to a slider but on a bigger scale. Often mounted on a rails to give longer runs that can be straight or even circular. The operator may be able to ride on the dolly or walk alongside. But as shown in the talk, don't forget the ladder dolly or slider which will create Hollywood quality moves for a fraction of the price and can be packed for travel



• Dutch head: A second camera head or tilt plate used to purposely tilt the horizon away from its level position. "Dutch" does not refer to Holland; it is a distortion of "Deutch," which is German. This was a technique made popular by early German expressionist filmmakers to add a dynamic and sometimes unsettling feel to a shot. In the late 1930s, the techniques was adopted by Hollywood directors, being used in such classics as James Whales in "The Bride of Frankenstein"



• **Shoulder rig**: A support for cameras of all sizes that gives the operator the ability to have the weight of the camera pass through the entire body, as opposed to just the arms. Multiple points of contact also offer a steadier platform. This simplicity and mobility of these rigs makes them ideal for documentary shooting. The unsteadiness, when compared to a tripod, can also convert a sense of reality. A creative choice that seems less crafted but more in the moment



• **Jib / Crane**: A tripod or dolly based arm allowing the camera to swing in an arc or vertically. Also usually combined with a fluid head on the end of the jib to add further versatility. A great tool as long as the arc motion works with the planned shots



• Gimbal: A electronic, three axis stabilizer that comes in many shapes & sizes to hold anything from a smart phone to a heavy camera rig. Allows for steady shots when the operator is moving. And can achieve many of the moves usually created on a slider, dolly or jib. Essentially more accessible version of the Steadicam, both in terms of budget and training. But can become heavy depending on shoot duration and camera weight



Vest supports for gimbals and heavy cameras: Also available
in different configurations but generally built around a vest that
transfers the weight of the camera / gimbal to the torso and
hips. Common versions are the Easyrig, Readyrig or Steadicam
type vests adapted to accept a gimbal

