



‘Capturing motion’

What do we define as motion?

- Capturing a scene where a part has movement or speed
- The image has to capture or give the illusion of movement or speed in the scene
- Use of creative blur for special effect

Methods to illustrate motion?

- Freeze the action
- Motion blur to when the moving parts of the scene are blurred
- Panning is when the moving parts in the scene are relatively still while while rest of the scene is blurred
- Multiple exposures where a moving part in the scene is repeated in different positions
- Combine frozen / blur both in same image
- Intentional camera or lens movement as a creative approach where there is no movement in the scene

Tips to capture movement

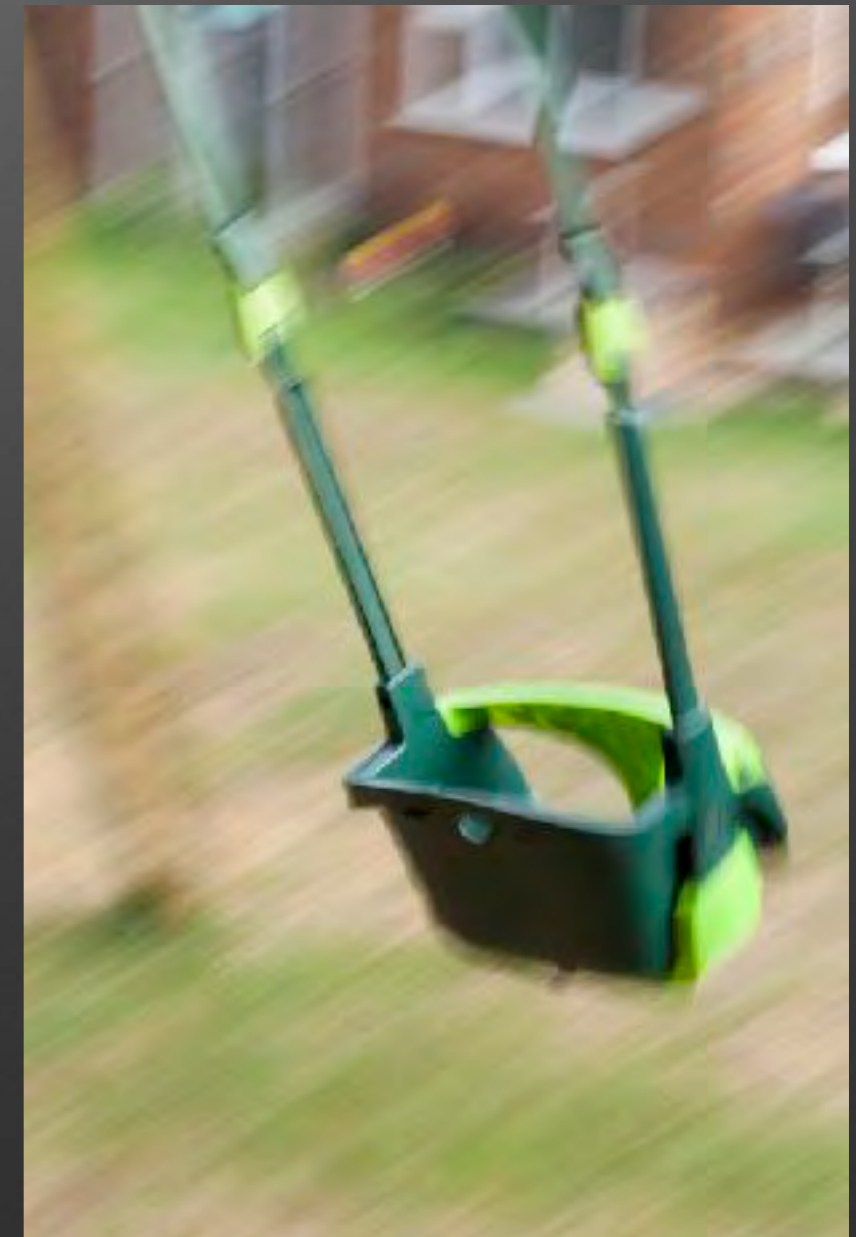
- Assess how best to show the movement
- Assess what speed the parts are moving and match shutter speed with the technique
- Does the background affect the scene good or bad, dark backgrounds make it easy to combine images sharp or blurred
- Practice your action if possible with a test shot
- If using a phone or composing the image on a screen try locking your arms with the camera to be more stable
- Some modern cameras have IS (Image stabiliser) modes to explore
- Some flashguns have a multi flash setting

Motion examples

1) Frozen - subject **sharp**, background **sharp**

2) Motion Blur - subject **blurred**, background **sharp**

3) Panning - subject **sharp**, background **blurred**



Tips to capture movement

To Freeze the action

- Use a very short/fast shutter speed - best for subjects which move very fast and for wildlife capturing the moment
- Longer lenses require faster shutter speeds
- Using a flashgun will freeze the action as the flash is a very short duration

Frozen



Tips to capture movement

To take Motion blur images

- Subjects moving fast will blur enough with 1/30 sec and camera can be handheld
- Subjects which move slowly will require camera support or tripod - say 1 sec or more, see '*working in low light*' guide

Motion Blur



Motion blur



Tips to capture movement

Taking Panning images

- Use slower shutter speeds and follow the movement keeping the bit you want to keep sharp fixed in the frame
- Try to pick a point of interest near the front or central of the moving subject, e.g. a wheel or front near headlight good on a car, the face on a person
- Rehearse your camera movement before if possible

Panning



Tips to capture movement

To take Combine frozen / blur images

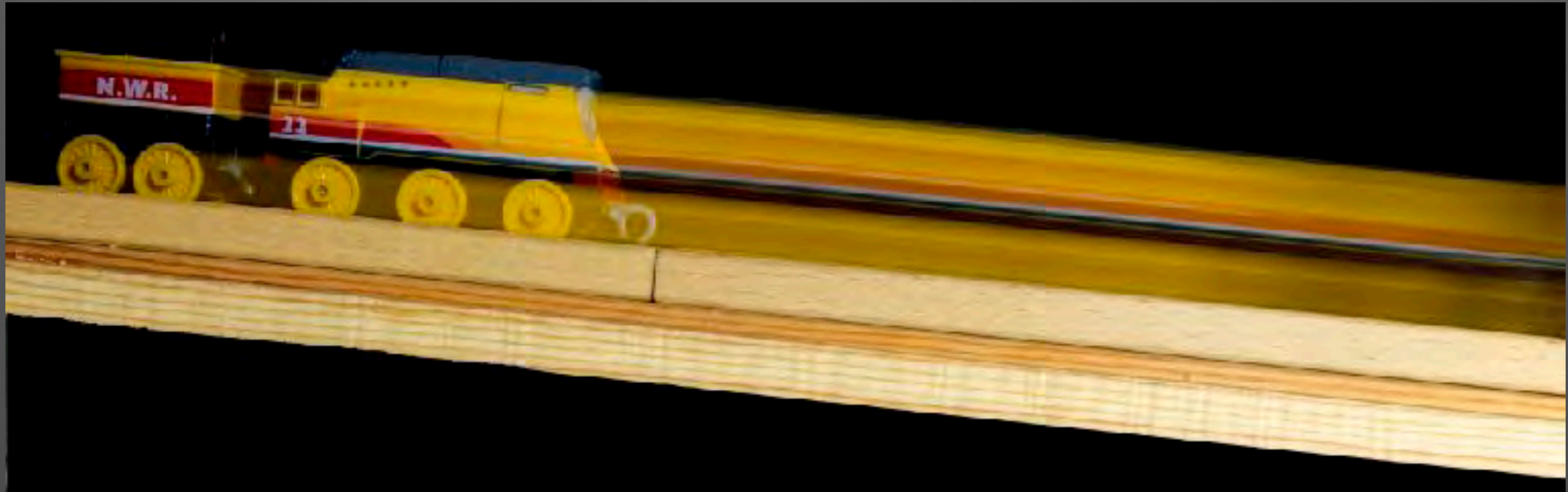
If using Auto settings with flash 'on camera' firing first

- Can use settings for 'fill-in' flash and slow shutter speed
- OR - Set flashgun and camera exposure with slightly reduced output
- If flashgun is 'off camera' increase output

If you want the flash to fire last at the end of the blur

- Set flashgun and camera to 'manual'
- Set flashgun and/or camera to '2nd Curtain' ◀◀◀
- Settings as above for exposure

Combine frozen / blur - flash with a slow shutter



flash at start of exposure



flash at end of exposure

Combine frozen / blur - flash and slow shutter



Tips to capture movement

To take Multi flash images

- This works well with a light subject against a dark background
- Set camera and lens to 'Manual' and use a tripod
- On Flashgun select 'Manual'/'Multi', 'a low output', 'number of flashes' and 'frequency' (*often shown as Hertz which is number of flashes in a second - so 1 Hz = 1 sec interval, 5 Hz = 0.2 sec interval, 20 Hz = 0.05 sec interval*)
- If you say choose 10 flashes @ 5 Hz then the camera needs to expose for at least 2 seconds, can use 'Bulb'
- Trial and error with ISO and Aperture settings
- Can also set camera to multi exposure **with or without flash**

Multi-exposures



Frozen



Motion blur



Frozen + Motion blur



Multi-exposures



Tips to capture movement

To take Intentional camera movement blur images
and zoom lens blur

- Swing the camera to create overall blurred streaks
- Rack the zoom lens for central impact, start the action then fire the shutter for a smooth result and to avoid a staggered image

Swing - with fill in flash



Zoom - smooth



Zoom - smooth + still image added as layer



Zoom - staggered



Zoom - created in after effects



Summary

- Freeze the action - use a very short shutter speed - best for subjects which move very fast, longer lenses require faster shutter speeds, also using a flashgun
- Motion blur - use a slower shutter speed but keep the camera still
- Panning - use slower shutter speeds and follow the movement keeping the bit you want to keep sharp fixed in the frame
- Multiple exposures - can be a burst of exposures, best to use a tripod and short shutter speeds or use multi flash
- Combine frozen / blur in same scene - use of flash and slow shutter speeds or with camera on tripod take extra shots with short and slow shutter speeds and combine after
- Intentional camera or lens movement - **swing** to create overall blurred streaks or rack the **zoom** lens for central impact

The image features a hypnotic spiral background composed of concentric circles in shades of red and black. The spiral starts from a dark blue center and expands outwards. Overlaid on this background is the text "That's all Folks!" written in a white, elegant cursive font. The text is positioned diagonally across the center of the spiral.

That's all Folks!