

# Storyboarding

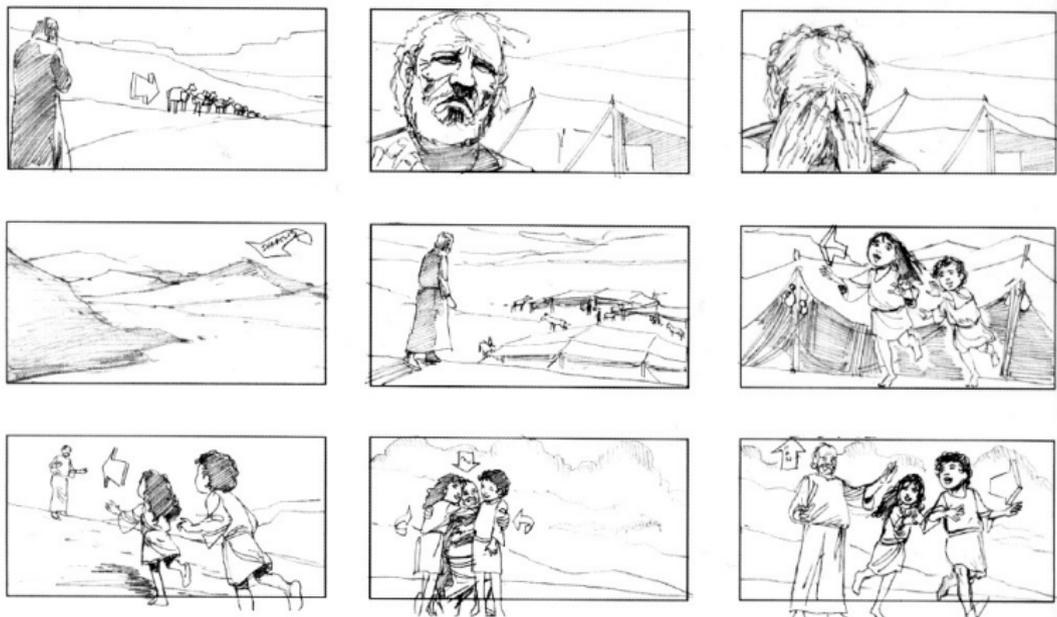
## CS4340 Digital Special Effects

Leow Wee Kheng & Terence Sim

Department of Computer Science  
School of Computing  
National University of Singapore

# Storyboard

- A sequence of images that flow together to tell a story.



*Full Flame* storyboard by Alex Saviuk [Sim07].

## Storyboard

- A sketch of the director's idea of the final production.
- Used to visualize and refine ideas.
- Used to help develop, enhance, visualize script.
- An effective form of communication with production team.
- Lets production team start work early.

## Benefits of storyboarding

- Storyboarding is important even for low-budget production.
- Help to save time, money, and effort in actual production.
- Reduce production wastage and delay.

Comments: [The Lord of the Rings](#) [LoR].

## Storyboarding skills

- Don't have to draw well to produce functional storyboard.
- Many directors can't draw well.  
But, they still draw on storyboards to communicate ideas.
- Professional storyboard artists usually draw well.
- More important skill:  
Understand story and camera.
- Should also learn directing and editing.

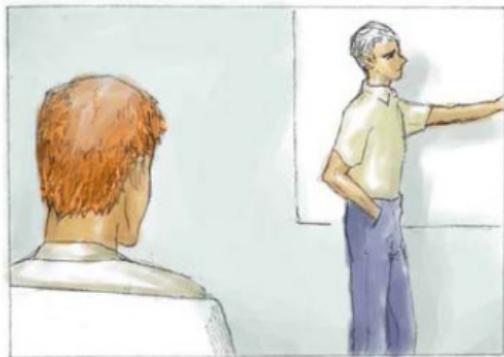
# The Art of Storyboarding

- Each panel of a storyboard depicts a scene: physical environment, set design, characters, etc.
- Each panel typically corresponds to a shot.
- Often contains scene description, camera and lighting information.

Example: *The Reflection* (2004)

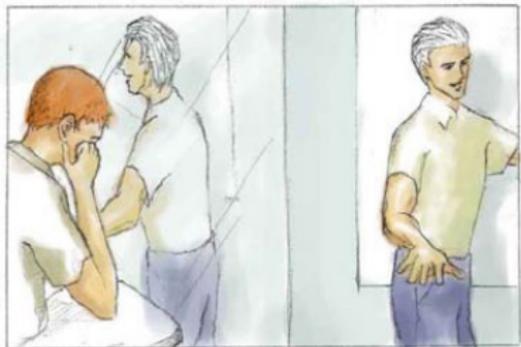


Wide shot of a classroom, gradually zooming in to capture the teacher and one particular student.



Over-the-shoulder shot.

POV: The student's view. At this point, the glassy surface may be visible, but we do not yet pay special attention to it.

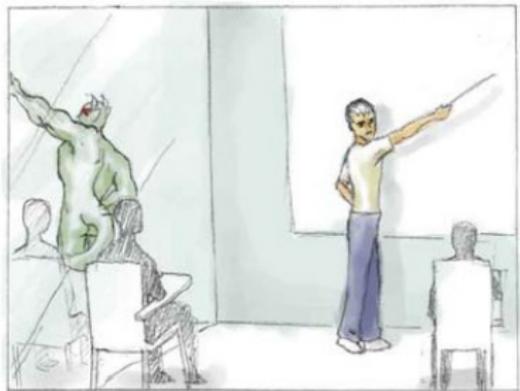


Mid shot. The student gets bored and starts to stare at the glassy surface.



As the student daydreams, the reflection of the teacher gradually morphs into a creature. Suddenly the student realizes that the reflection is unnatural.

- Recall camera shot type, camera angle, and camera motion.



Wide shot.

The student amuses himself by watching how the creature moves as the teacher moves. The main interest in this shot lies on the teacher and the creature.

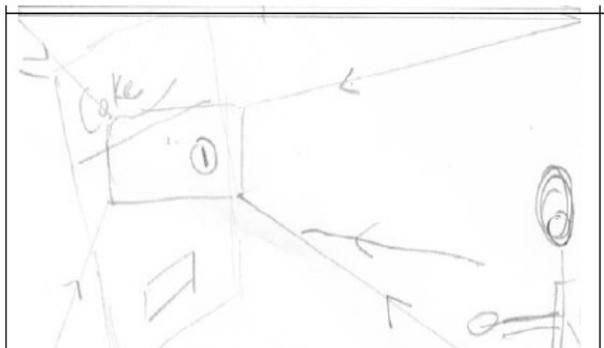
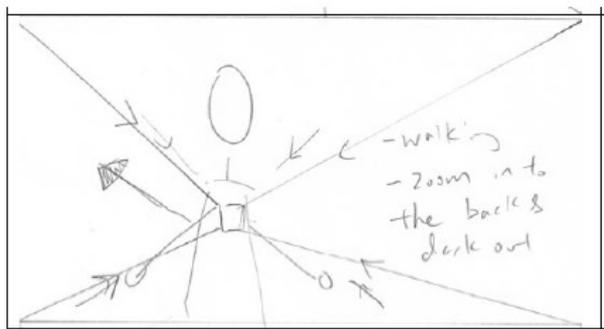
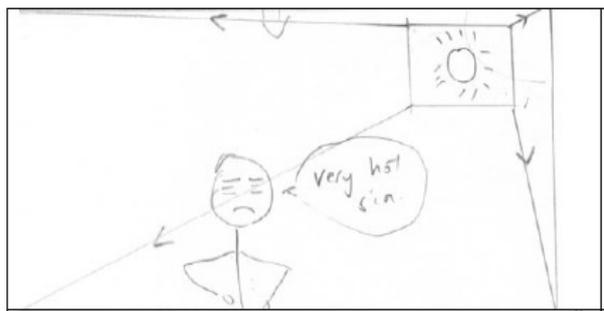


Mid shot.

The fun ends when the student finally decides to shake his head and start paying attention to the lesson. After he shakes his head, the shot shows that the reflection is now a natural one.

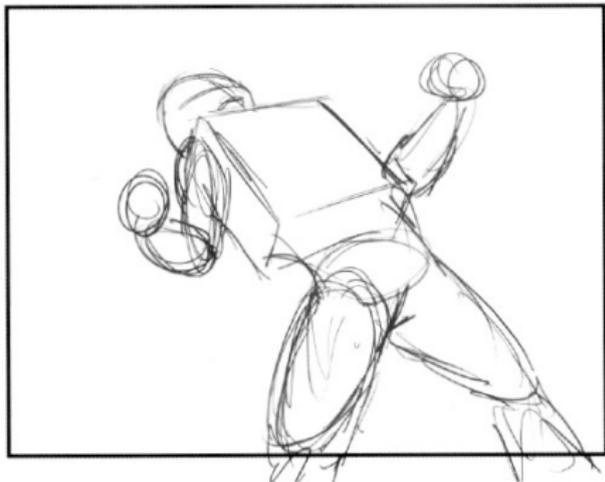
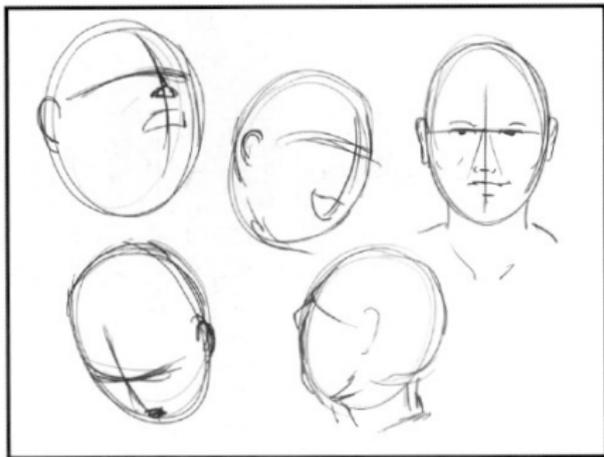
- Sequence of panels depicts change of shot or cut.
- Recall guideline for cuts: avoid indecisive and shock cuts.

## Stick Figures



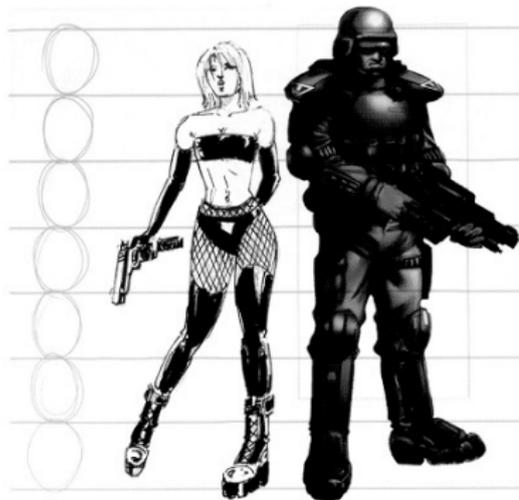
- Sketches of stick figures are not so good.
- Can't tell which orientation the characters are facing.

## 3D Look



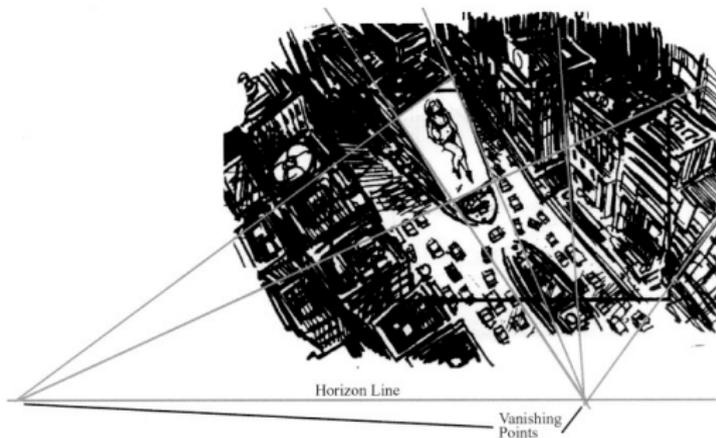
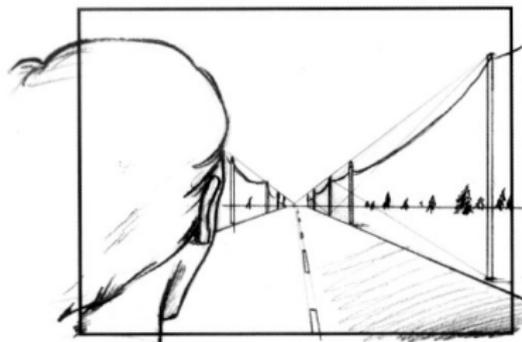
- It's best to give them a bit of 3D look [Sim07].
- Draw vertical **nose line** to indicate left-right orientation.
- Draw horizontal **eye line** to indicate up-down orientation.
- Use rectangular block to indicate body orientation.

## Scale

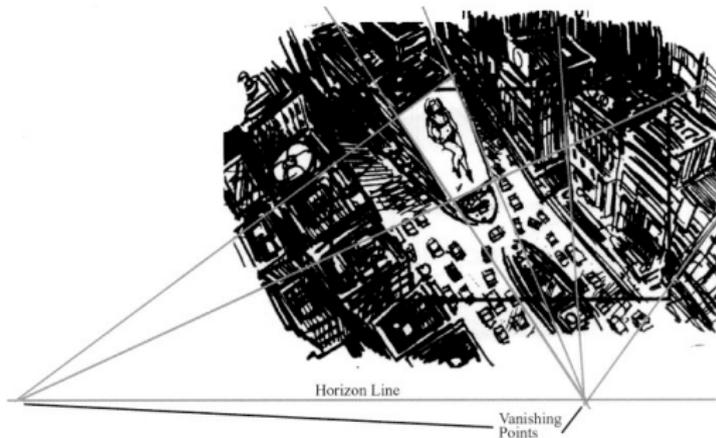
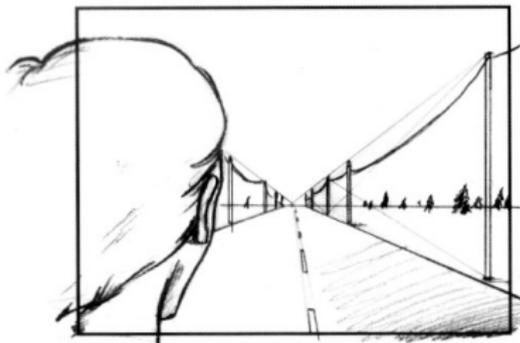


- Scale is important [Sim07].
- A man stands at 6.5 to 9 heads high.
- A woman is usually a bit smaller, but with larger breast, shorter torso, and wider hips.
- An adult's elbow reaches the top of the head.
- A child's hand barely reaches the top of the head.

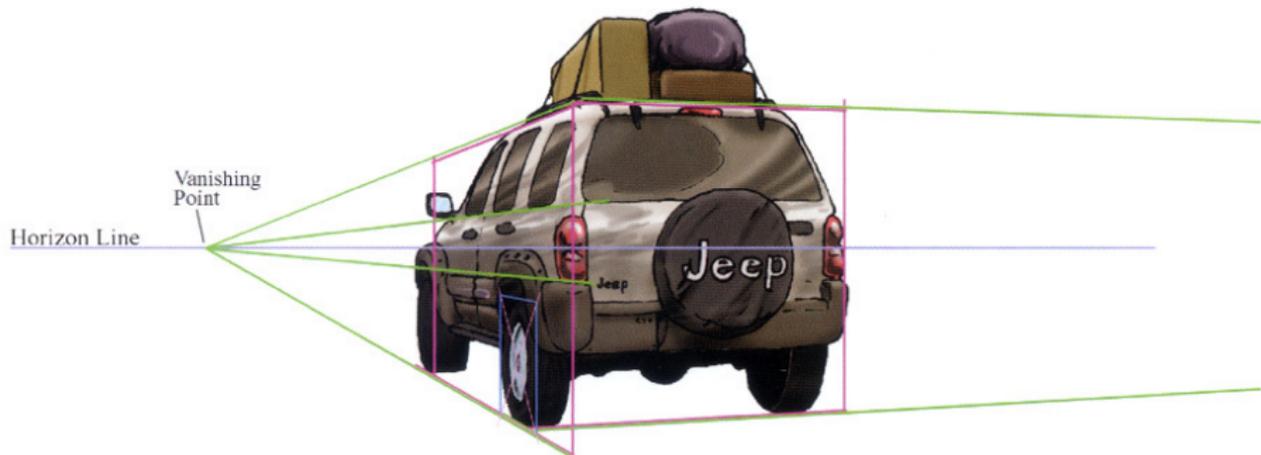
# Perspective



- Use vanishing lines and points to indicate perspective [Sim07].
- Can have one or more vanishing points.

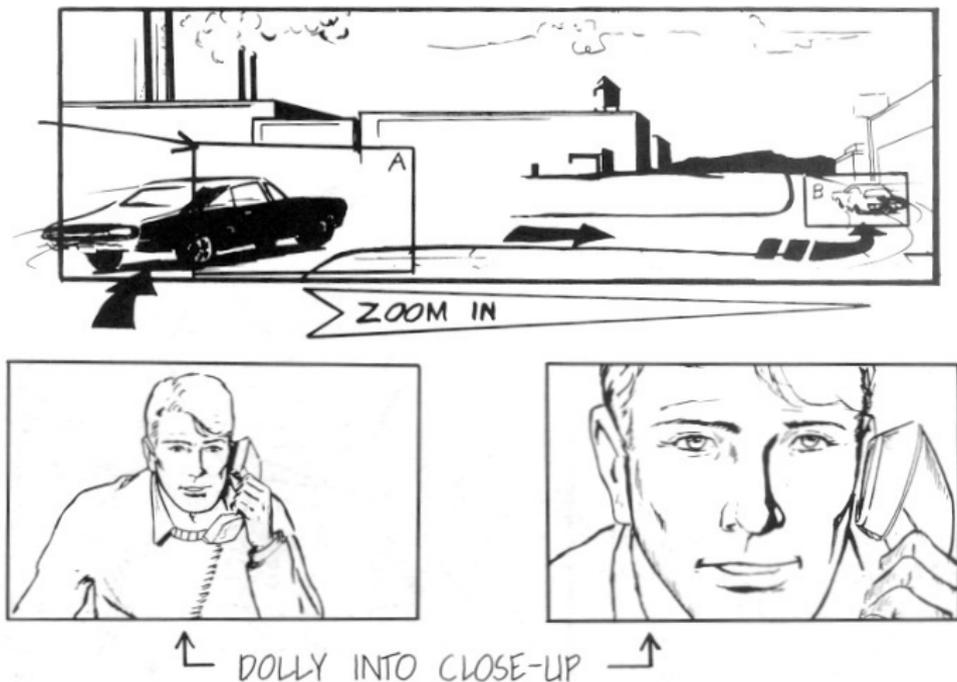


- Horizon line indicates camera angle [Sim07].
- Left to right: low angle, eye level, high angle.



- Objects also have perspective [Sim07].

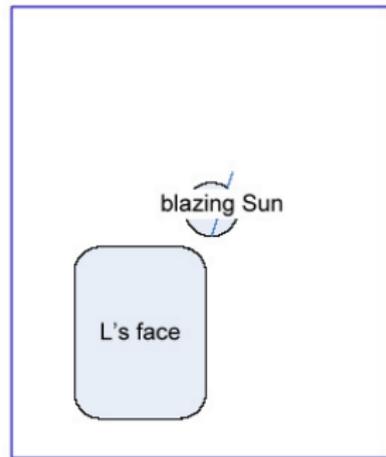
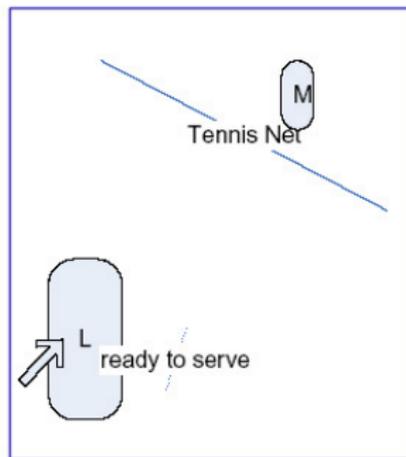
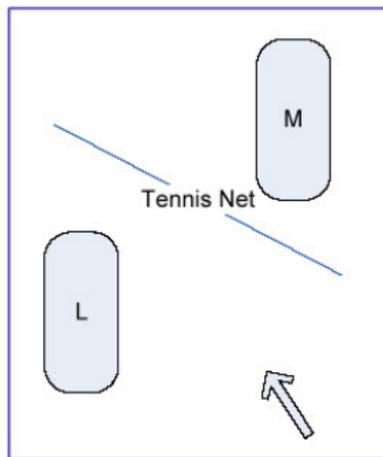
## Camera Shot and Motion



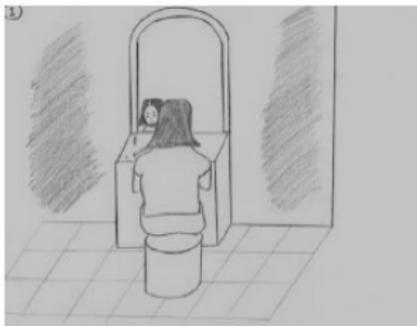
- Indicate object and camera motion and change of camera shot size [Kat91].

# Negative Examples

What's wrong with this storyboard?



# What's the problem of this storyboard?



Wide Shot of the Room: The actor is in front of the mirror,



Close Up Shot: Zoom in to show the actor's image on the mirror clearly. The special Spectacles also visible at this frame.

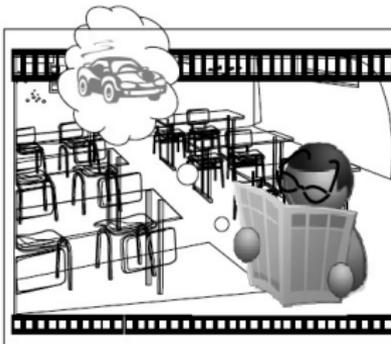


The actor starts to wear the unique spectacles

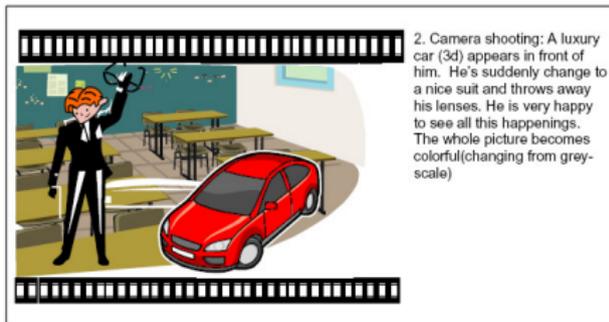


Once the actor finishes wearing it, her image is morphed in to a funny CG Character.

# What about this storyboard?



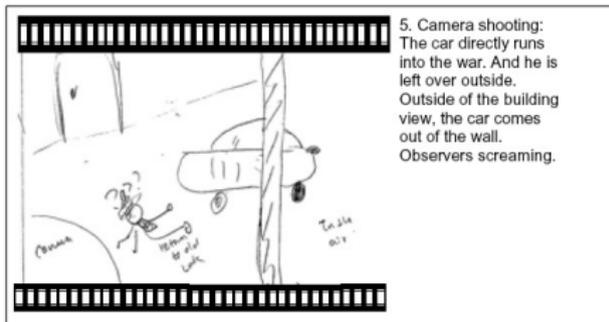
1. Camera shooting: A young guy in a classroom reading a luxury car magazine. The car on the page is reflected on his glass. He is imaging his good life (special effect). The whole picture is grey-scale.



2. Camera shooting: A luxury car (3d) appears in front of him. He's suddenly change to a nice suit and throws away his lenses. He is very happy to see all this happenings. The whole picture becomes colorful(changing from grey-scale)



3. Camera shooting: zoom in to shoot his happy facial expressions. Try different angle to shoot and combine in one picture. He gives order to the car to go outside (by scripts).



5. Camera shooting: The car directly runs into the wall. And he is left over outside. Outside of the building view, the car comes out of the wall. Observers screaming.

See also: [https://www.youtube.com/watch?v=ux\\_Em11VsJI](https://www.youtube.com/watch?v=ux_Em11VsJI)

# Animatic

- Storyboard is static.
  - lacks dynamic information: shot duration, camera move, etc.
  - does not give a sense of the pace of the shots.
- Animatic is a sequence of storyboard images shown at the desired pace.
- Like a simple video composed of static frames.
- Can contain narrative, dialogue, sound effects, music.
- Give director a good sense of how the movie will look.

Examples:

- [The Lord of the Rings \[LoR\]](#)
- [Storyboard to Film Comparison \[LoR\]](#)

See also: <https://www.youtube.com/watch?v=PwMbiSRKafw&feature=youtu.be>

# Pre-visualization

- Pre-visualization adds on to animatic.
- Use crude CG animation to give director a better sense of camera shots and moves.
- Let director explore various shot possibilities before actual production.

Examples:

- [The Lord of the Rings \[LoR\]](#)
- [Hunter Hunted \(2007\)](#)
- [Pre-Viz to Film Comparison \[LoR\]](#)

# Summary

- Storyboard shows a static sequence of shots.
- Animatic shows a sequence of storyboard images at the desired pace.
- Pre-visualization use crude CG animation to give a better sense of camera shots and moves.
- Proper use of storyboards, animatics, pre-viz facilitates production process.

# References



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