

# Spitz Digital Institute

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# Spitz Digital Institute

Directing for the Dome

CG production Pipeline



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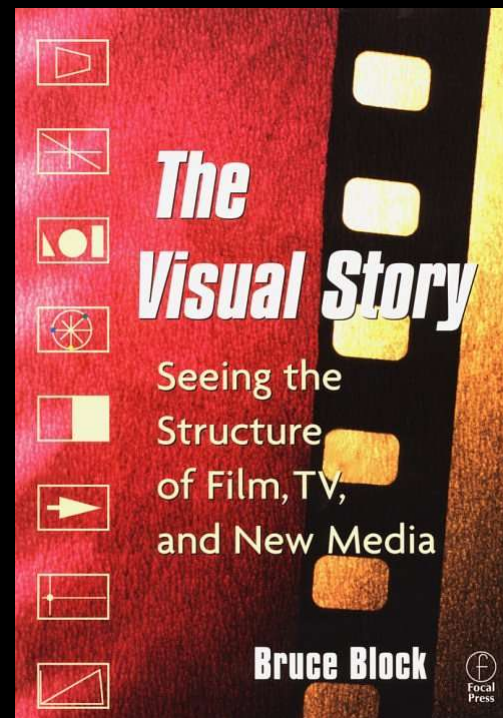
# It's all about the Story!!!!

- Everything else is just “plussing”
- If the story doesn't work, the script won't work
- If the script doesn't work, your audience will get bored
- If your audience gets bored, you're dead.
- Even documentaries tell stories.



# It's all about the Story!!!!

- All of the time and effort that you are about to invest will be fruitless if you forget this!



# Fulldome is a Visual Medium

- Your story is delivered through visuals
- It's not what you say, it's how you say it.
- Don't narrate to death!
- If it works better without it.... cut it!



# Production Overview

- Story
- Script/Screenplay: fewer words = better
- Storyboards
- Animatic
- Production
- Editing
- Post Production



# Understanding the Frame

(there is no frame)



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# Understanding the Frame

“Dome Master”



00094 Theater Model

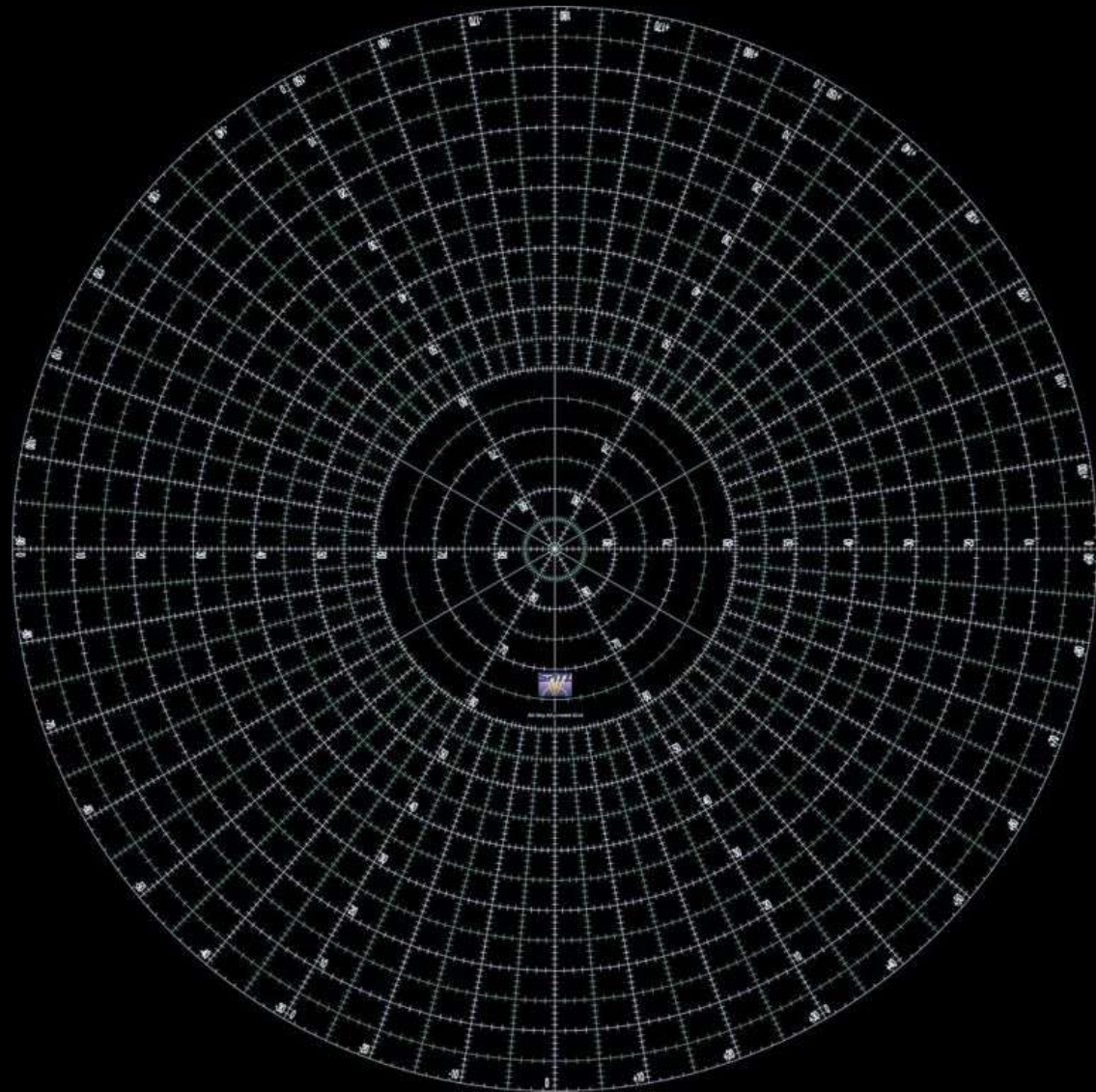
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# Understanding the Frame



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# Understanding the Frame

**YOU'LL NEVER LOOK  
HERE!  
(BEHIND YOU)  
(AND UPSIDE DOWN!)**

**ABOVE YOU**

**IN FRONT OF YOU**



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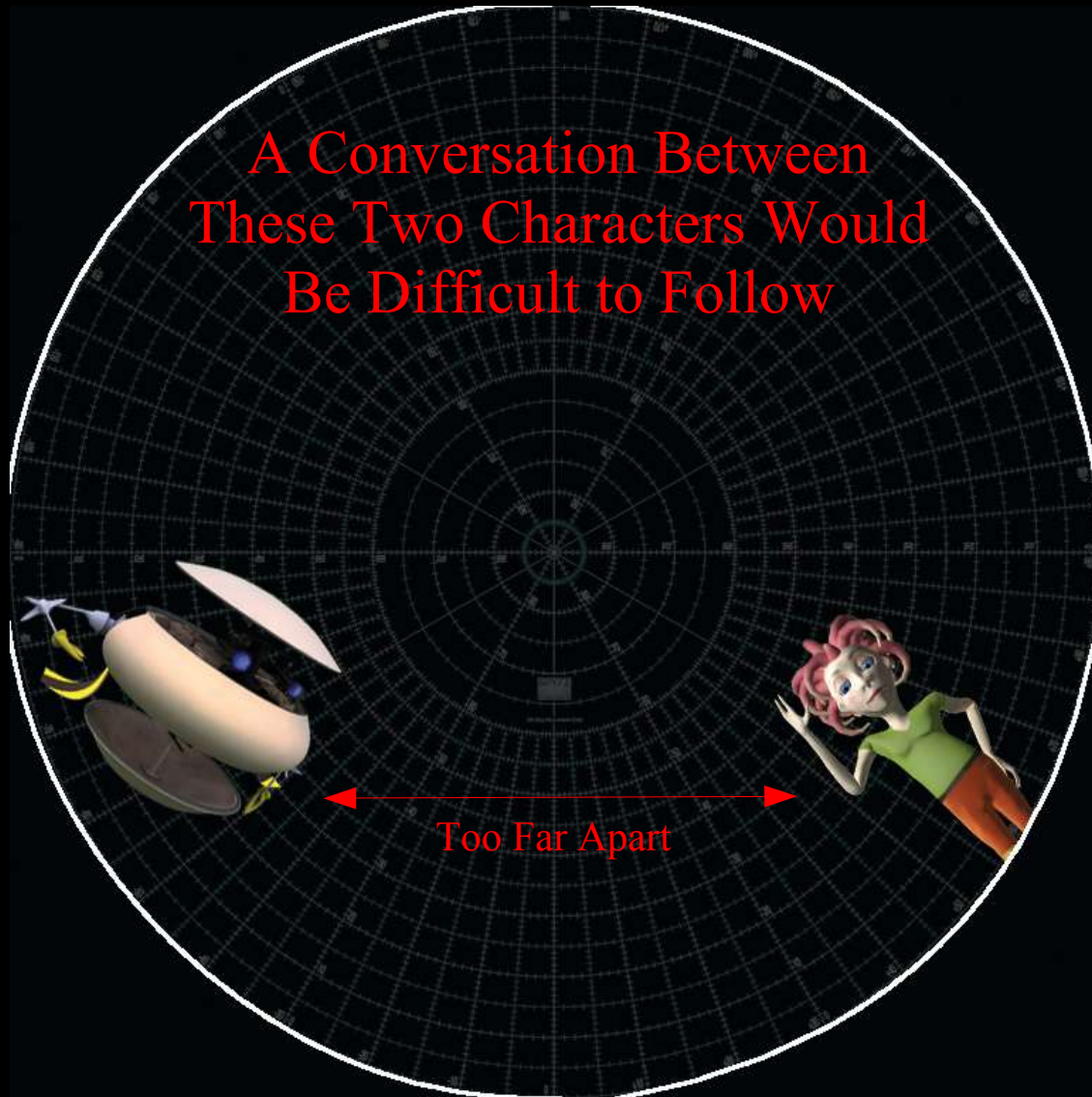
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# Understanding the Frame

A Conversation Between  
These Two Characters Would  
Be Difficult to Follow



# Composing the View



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# Composing the View

Field of View



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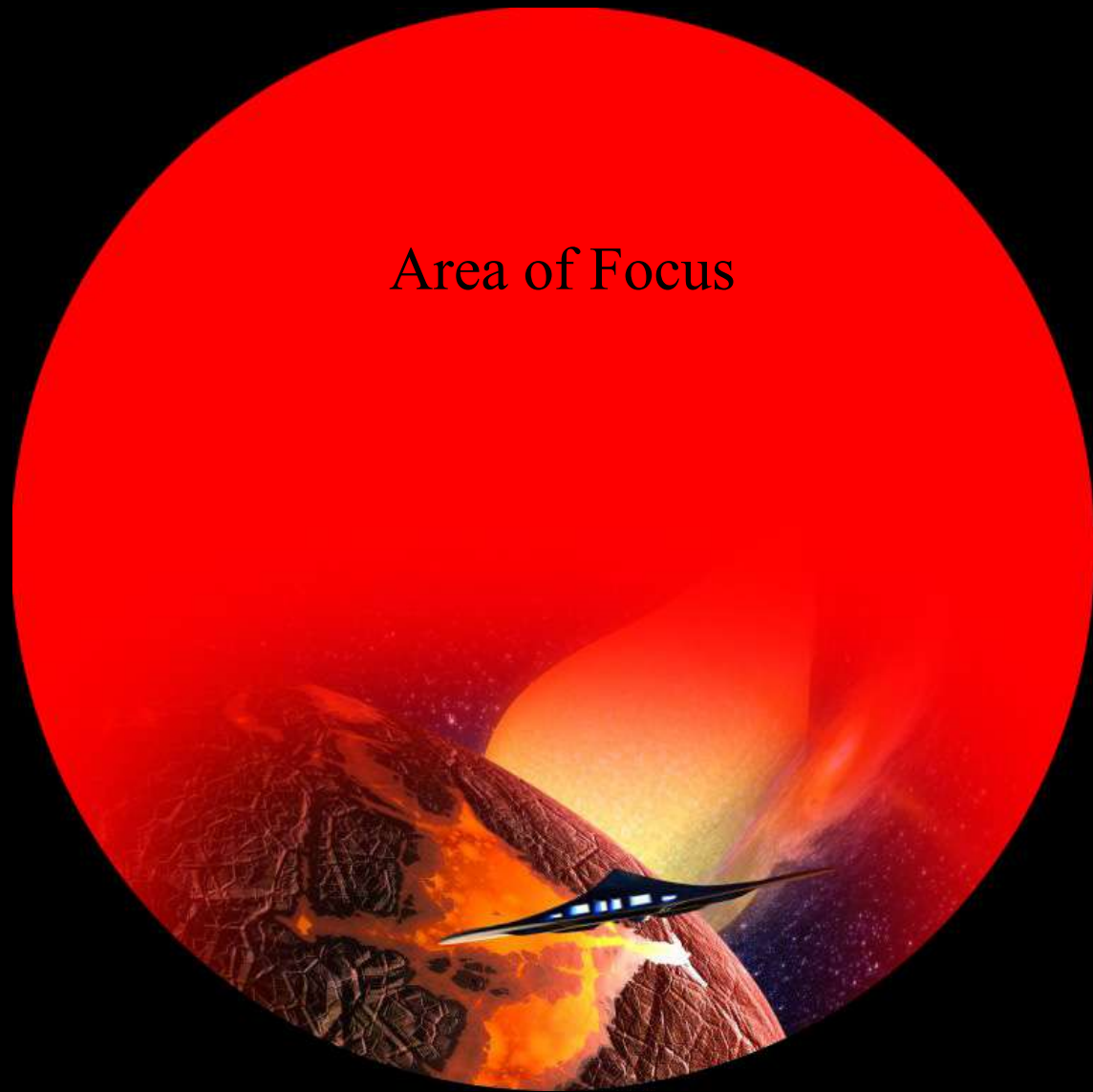
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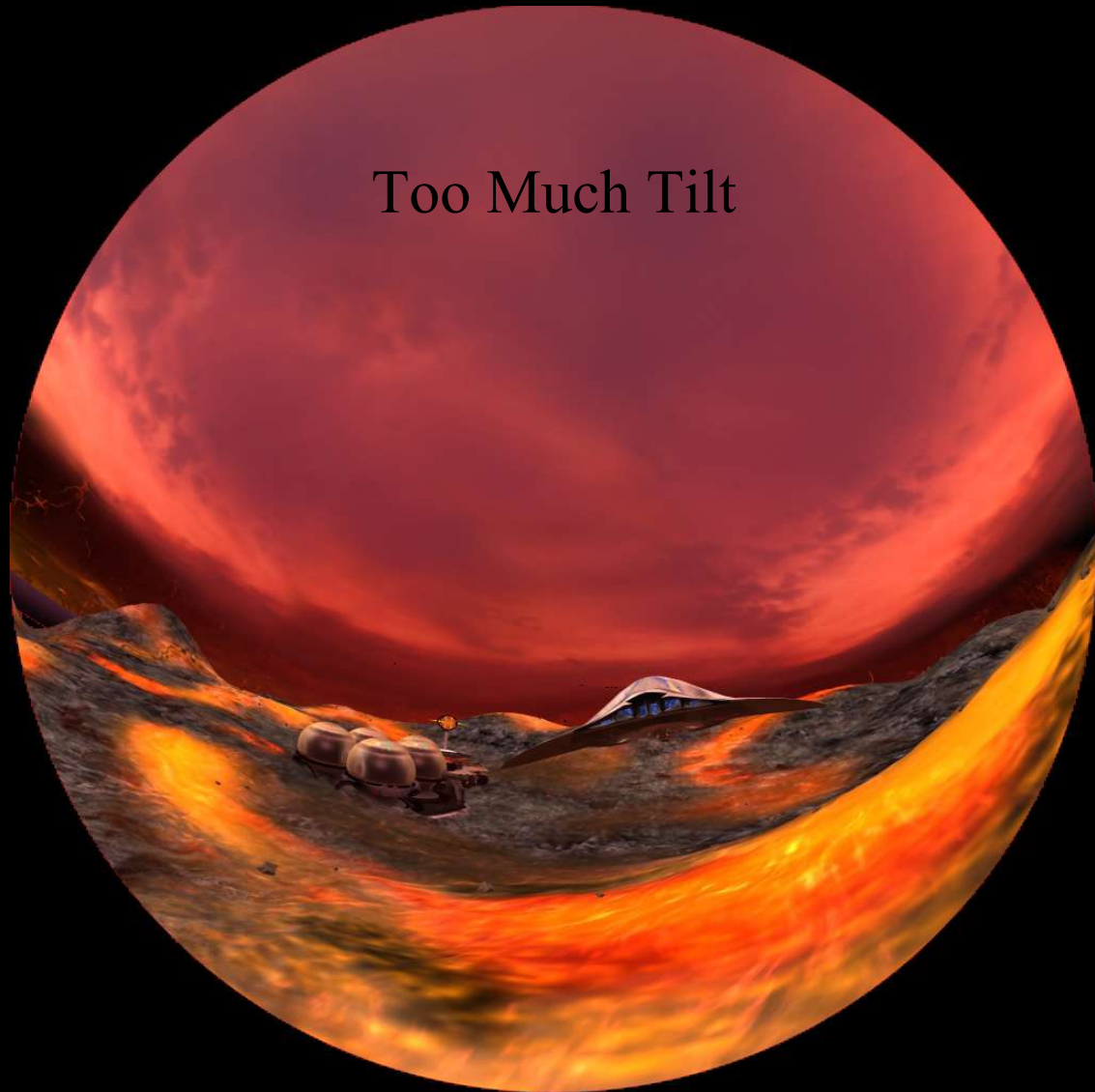
# Composing the View

Area of Focus



# Camera Tilt

Too Much Tilt



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# Camera Tilt

Better



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# Camera Tilt

- It's ok to severely vary the tilt your camera, but it's best to start level.
- The brain can adapt.
- Consistency is more important.
- 15-20 Degree Nominal Tilt works in most domes.



# Speed and Motion

- Motion appears much faster on the dome than on your monitor
- Too much speed or motion can cause “cybersickness”
- Downward camera motion seems to cause queasiness the fastest.

Fisheye Movie

Theater Movie



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# Speed and Motion

- If the speed looks ok on your monitor, slow it down by 3-5x.
- Like IMAX films, dome movies lend themselves toward a slower overall visual pace.
- Speed and Motion affects perception of story



# Color Issues

- Cross Scatter (dome demo)
- Limited contrast
- Complimentary colors improve perception of contrast
- Dimming the back of the dome can improve contrast at the front.
- Pallet choice will affect perception of story.



# Editing

- Mix of cinema and simulation (Dome demo)
- Cuts can kill immersion
- Multiple shots within the same space can appear as “jump cuts”.
- Editing has a rhythm
- Editing choices effect story perception (do I really need to state this?)



# Some Common Fulldome Terms

- Render, Renderfarm
- Realtime
- Hemicube (glom)
- Polar/Cylindrical
- Bitmap
- Billboard



# Some Common Fulldome Terms

- Mpeg
- Aspect Ratio
- Frame Rate
- Dataset
- Targa
- Alpha channel
- composite



# References

- [www.fulldome.org](http://www.fulldome.org)
- [extranet.spitzinc.com](http://extranet.spitzinc.com)
- [www.cgtalk.com](http://www.cgtalk.com)
- The Visual Story – Bruce A. Block
- The Animator's Survival Kit – Richard Williams

