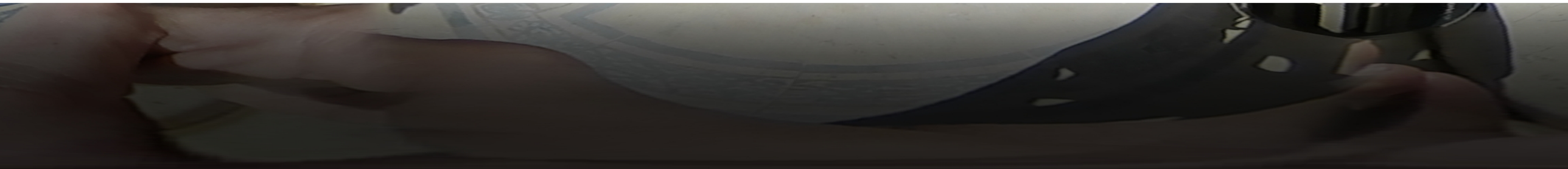
360 PRODUCTION



360 IMAGE TYPES – EQUIRECTANGULAR (SPHERICAL)

360 IMAGE TYPES – PANORAMA (FLAT)

360 IMAGE TYPES – TINY PLANET

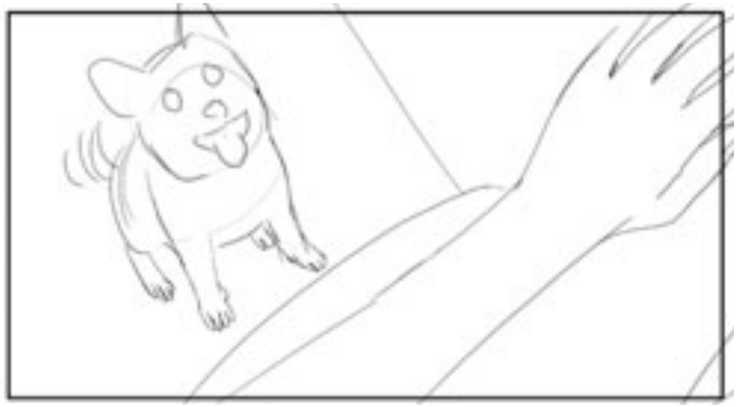
360 IMAGE TYPES – FISHEYE

360 IMAGE TYPES – DUAL FISHEYE

LINEAR PROJECTS

Based on the “frame”

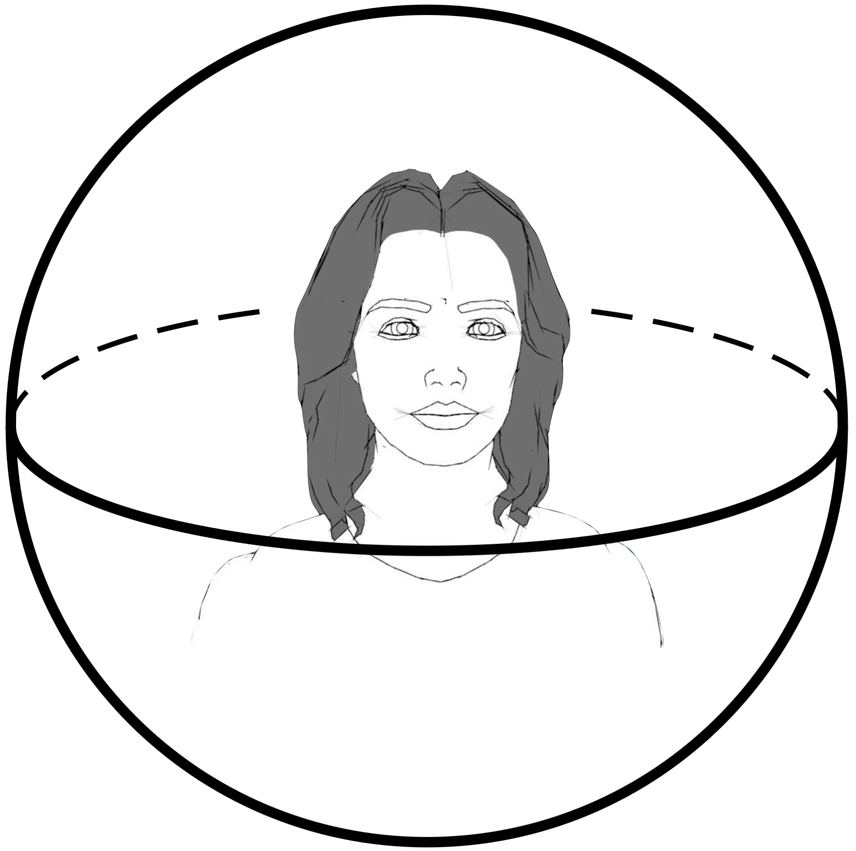
Creator controls the view



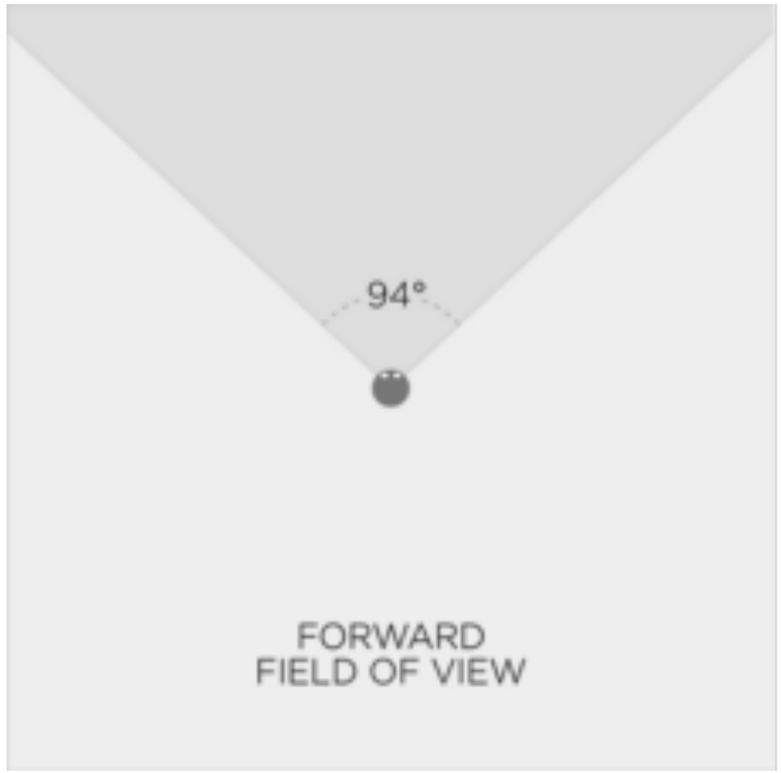
360 PROJECTS

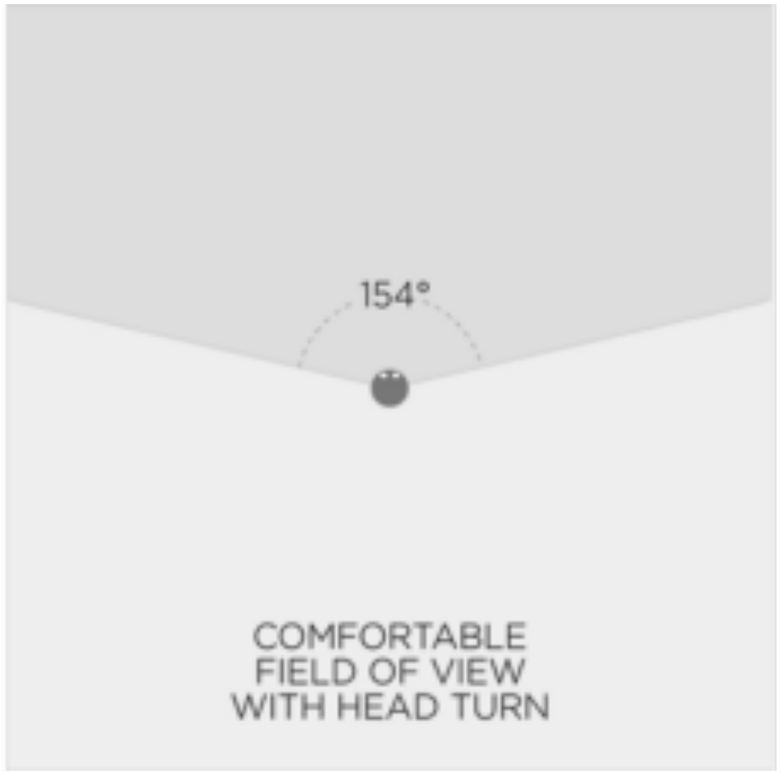
Based on the “sphere”

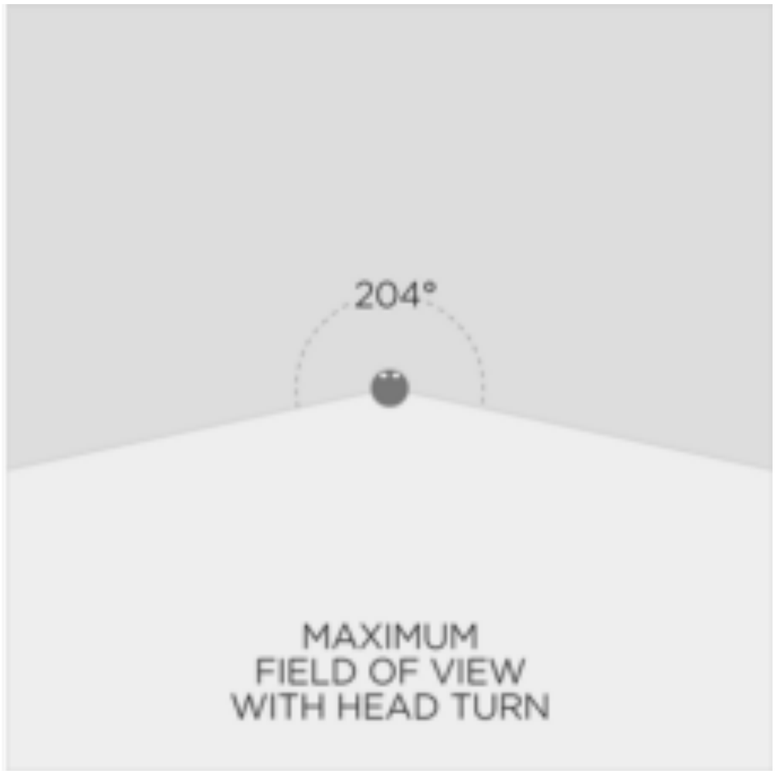
Audience controls the view



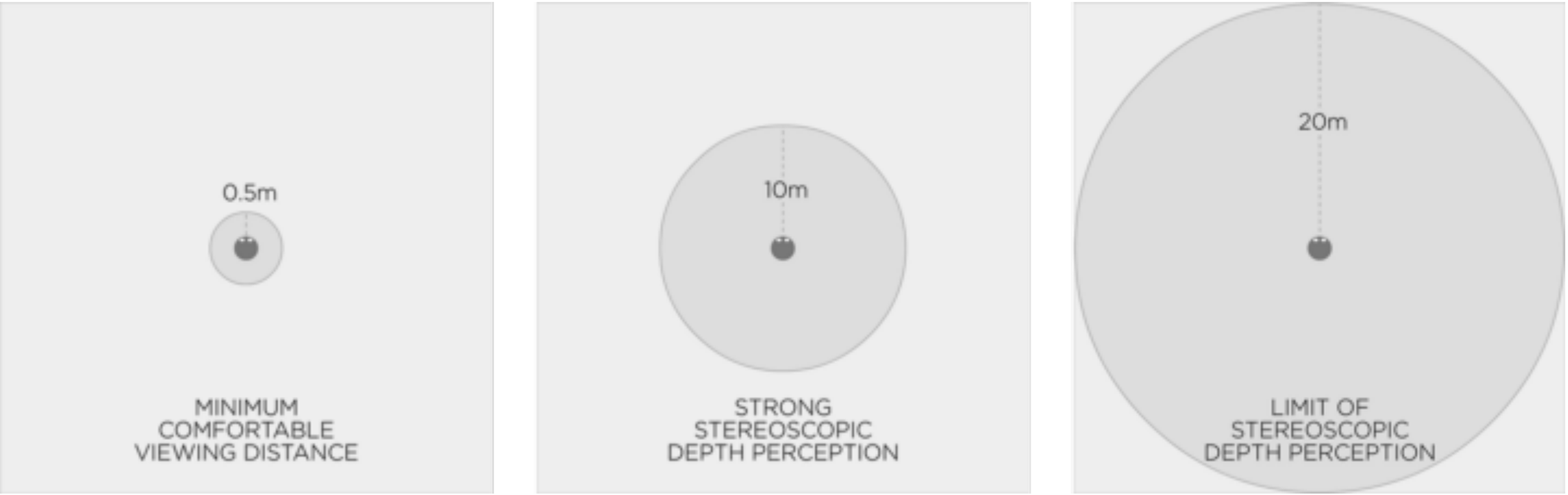
360 FIELD OF VIEW







360 VIEWING DISTANCE



DEGREES OF FREEDOM (DOF)

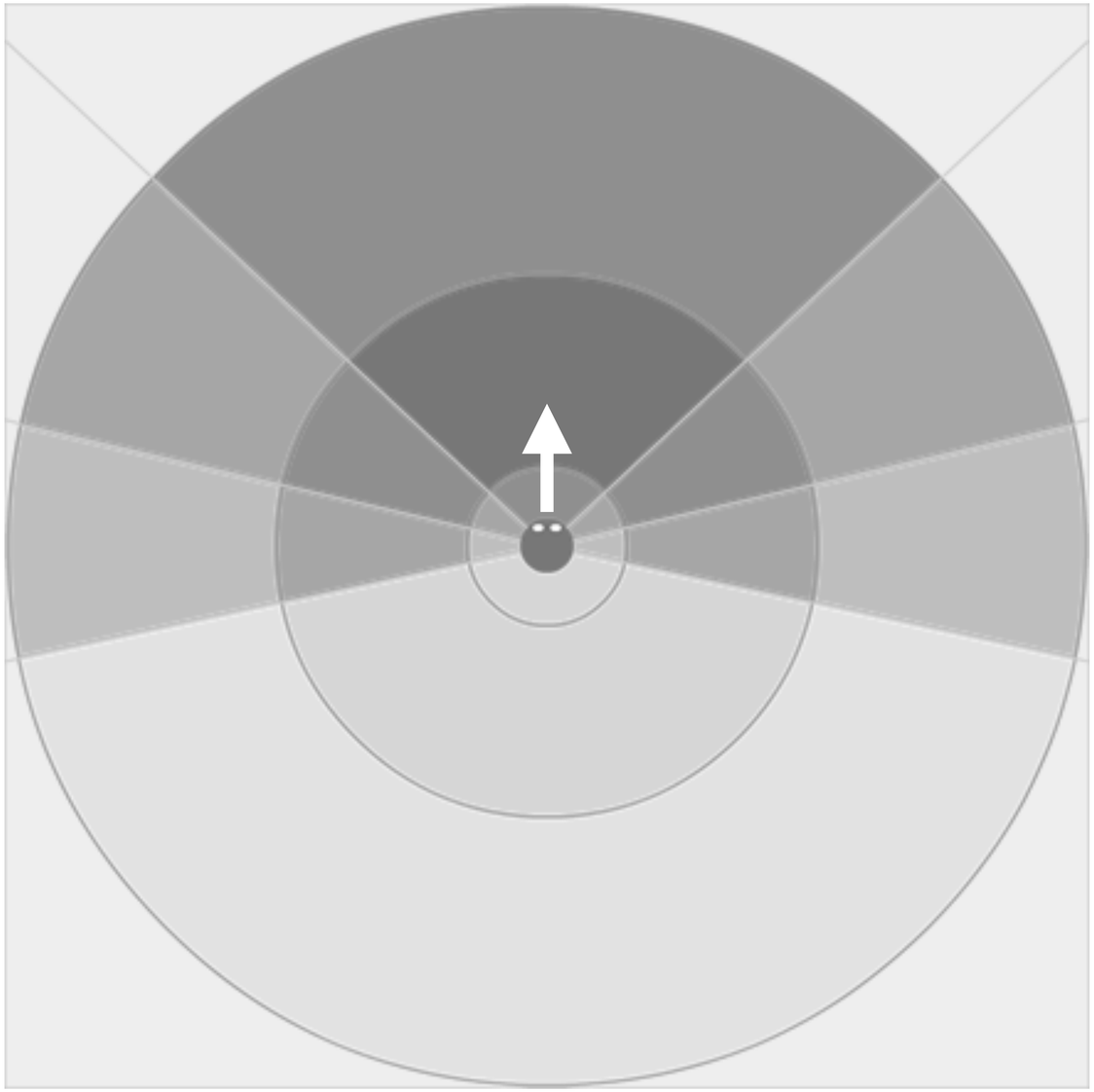
3 DoF

Left / Right - Up / Down - Head pivot left / right

6 DoF

Forward - Backward - Sideways - Up/Down

360 AREAS OF INTEREST



PLANNING FOR 360

Storyboard

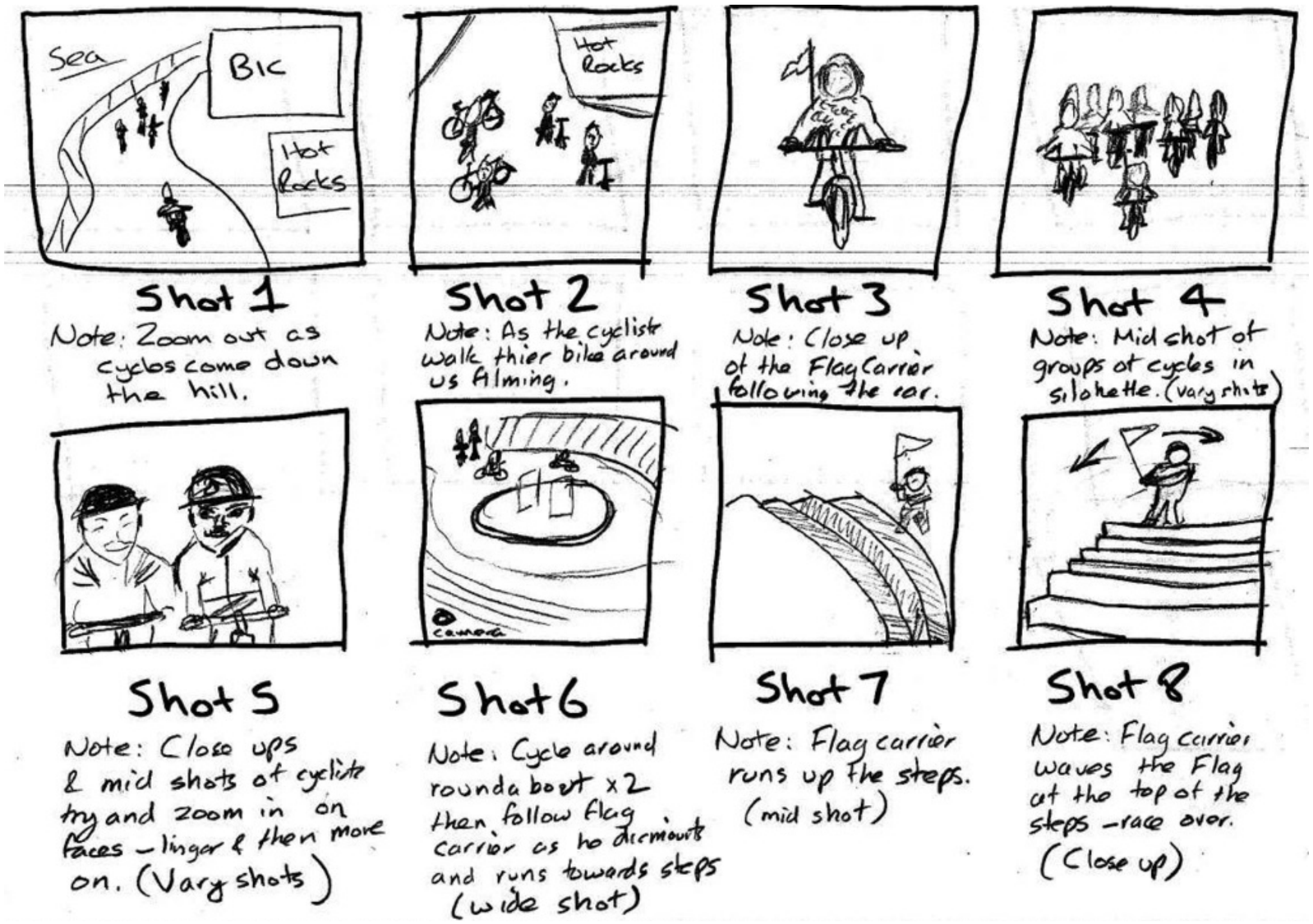
Check Location

- Physical
- Audio

Lighting - light source direction

- ~~Lights~~?

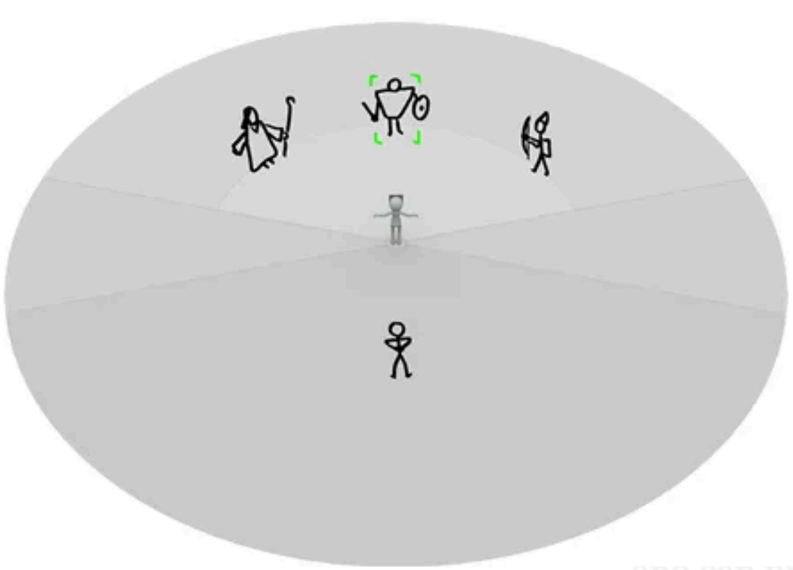
TRADITIONAL STORYBOARD (LINEAR VIDEO)

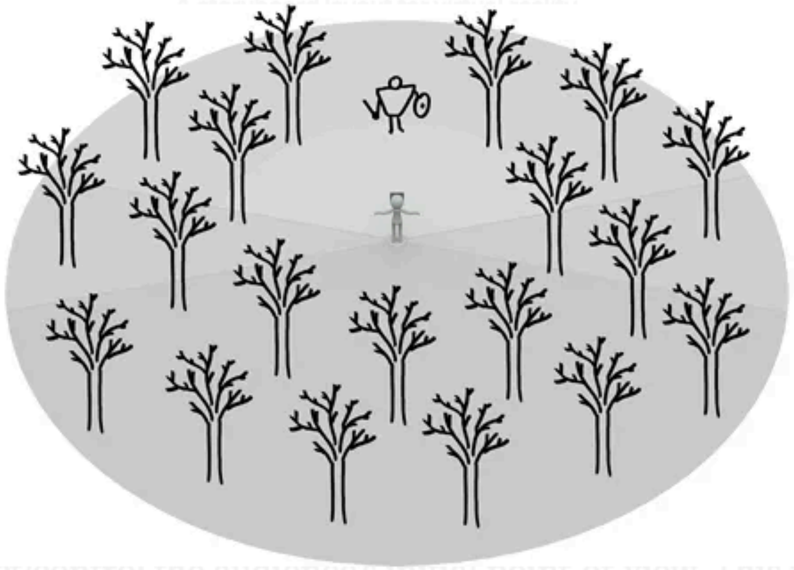


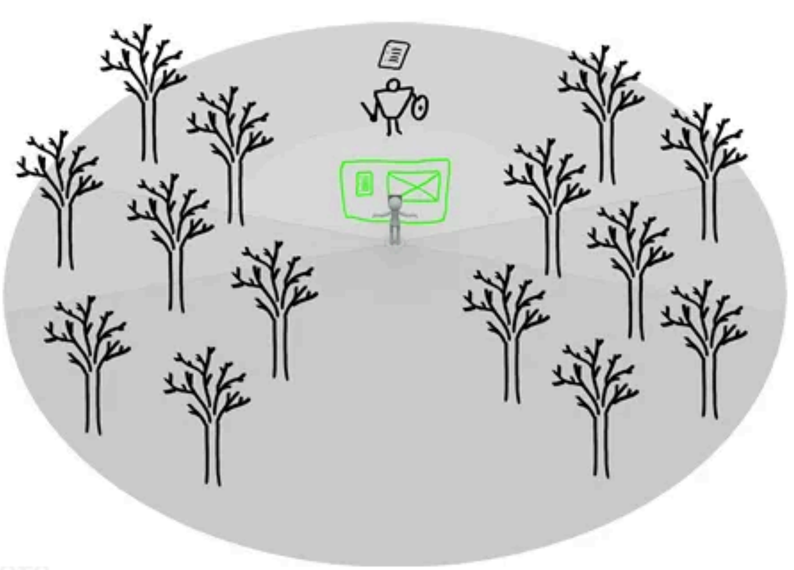
360 STORYBOARD

Vincent McCurley

360 STORYBOARD FRAMES

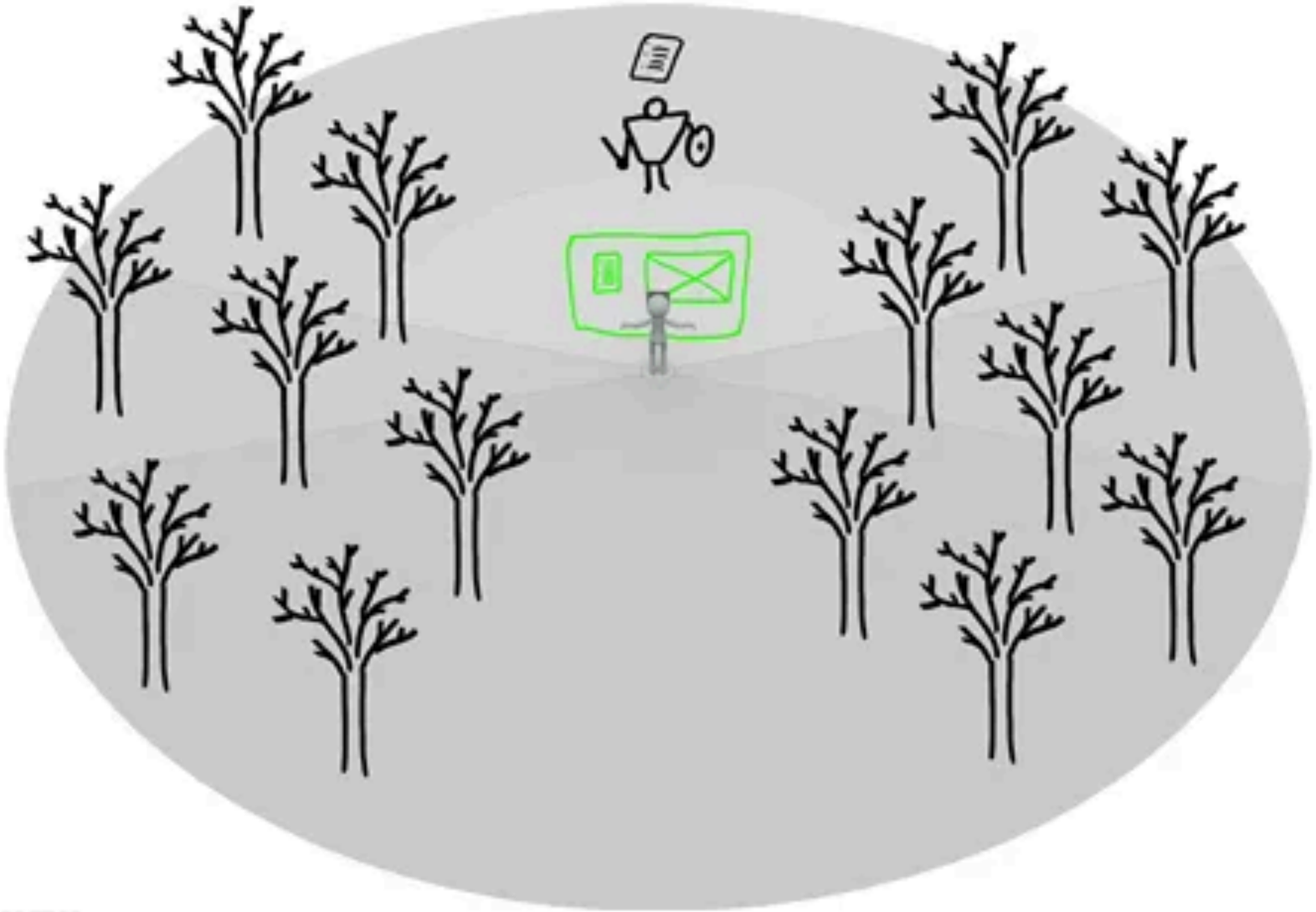






Vincent McCurley

360 STORYBOARD FRAME DETAIL



Vincent McCurley

DIRECTING ATTENTION - LINEAR

Camera movement

Edits and/or effects between shots

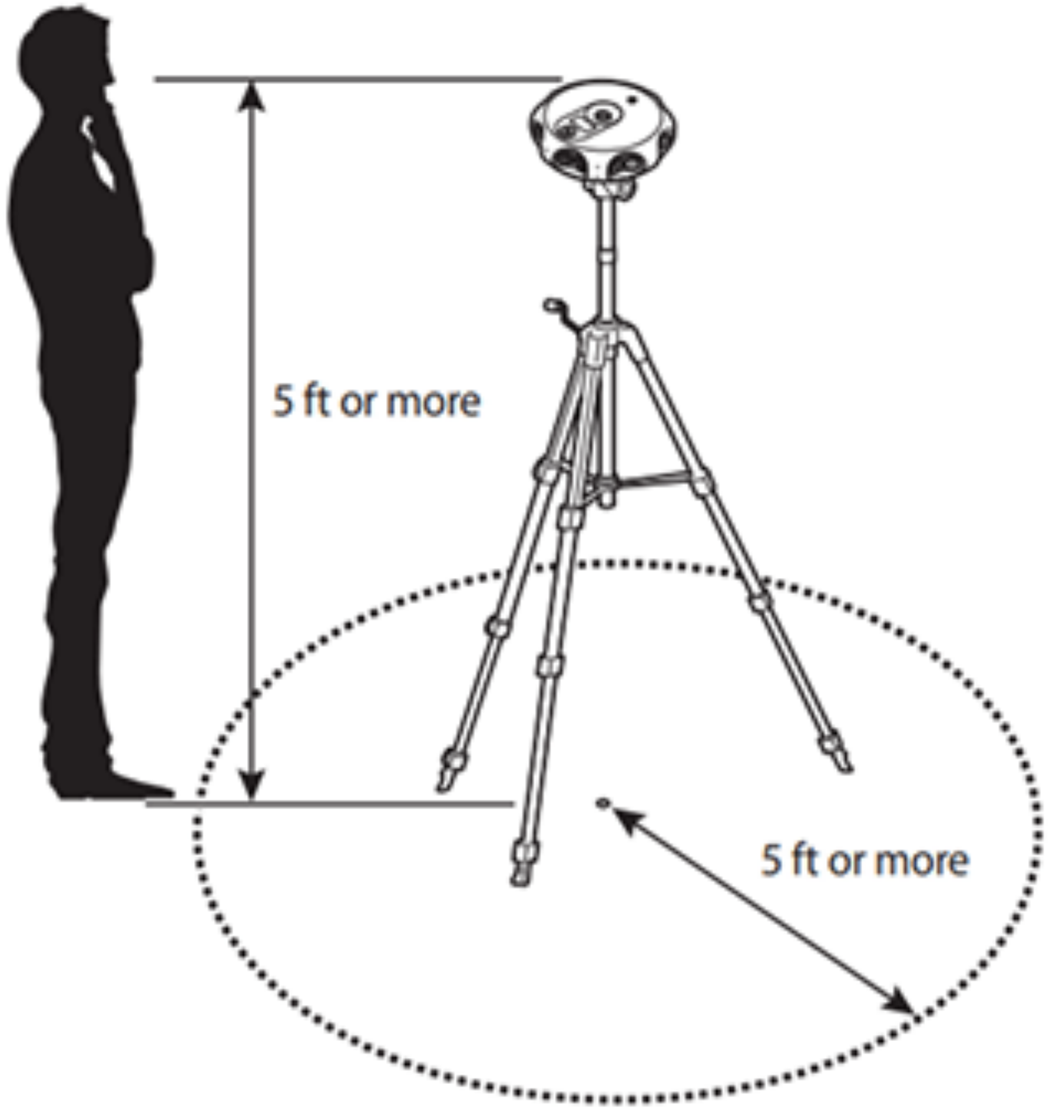
DIRECTING ATTENTION – 360

Visual cues

Audio cues

DIRECTING ATTENTION – POINTS OF INTEREST

360 CAMERA SET-UP



360 PRODUCTION - SET-UP

Camera Mounting

- Light stand - ¼-20 bolt mount
- Monopod
- Selfie Stick
- Tripod

Charge Batteries

Format SD card

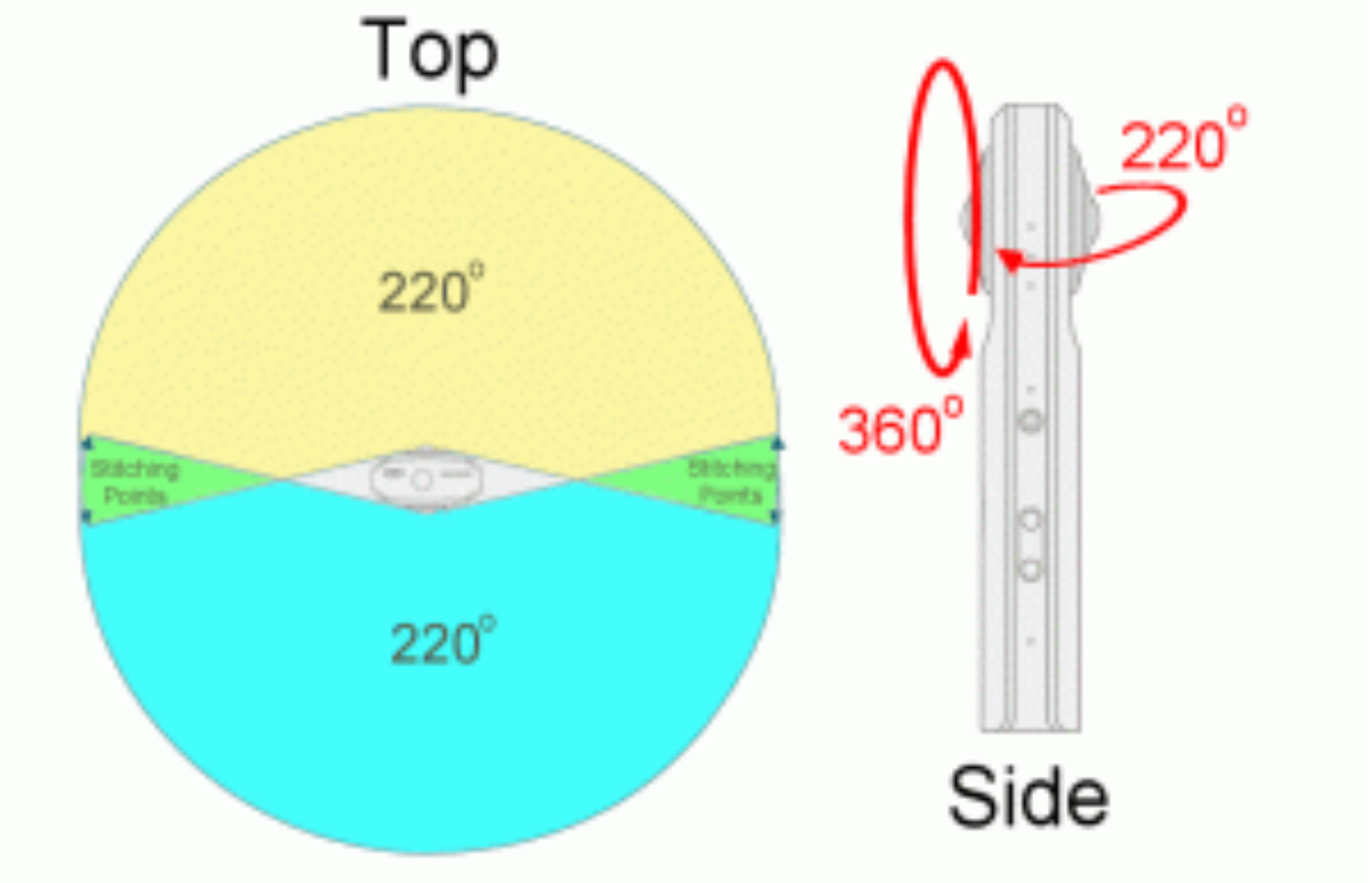
STITCHING

Where individual images join

Take into account when setting your shot

Keep the main subject out of the stitch line

STITCHING AREAS



STITCHING ERROR

AFTER RECORDING

Download files to your phone - WiFi

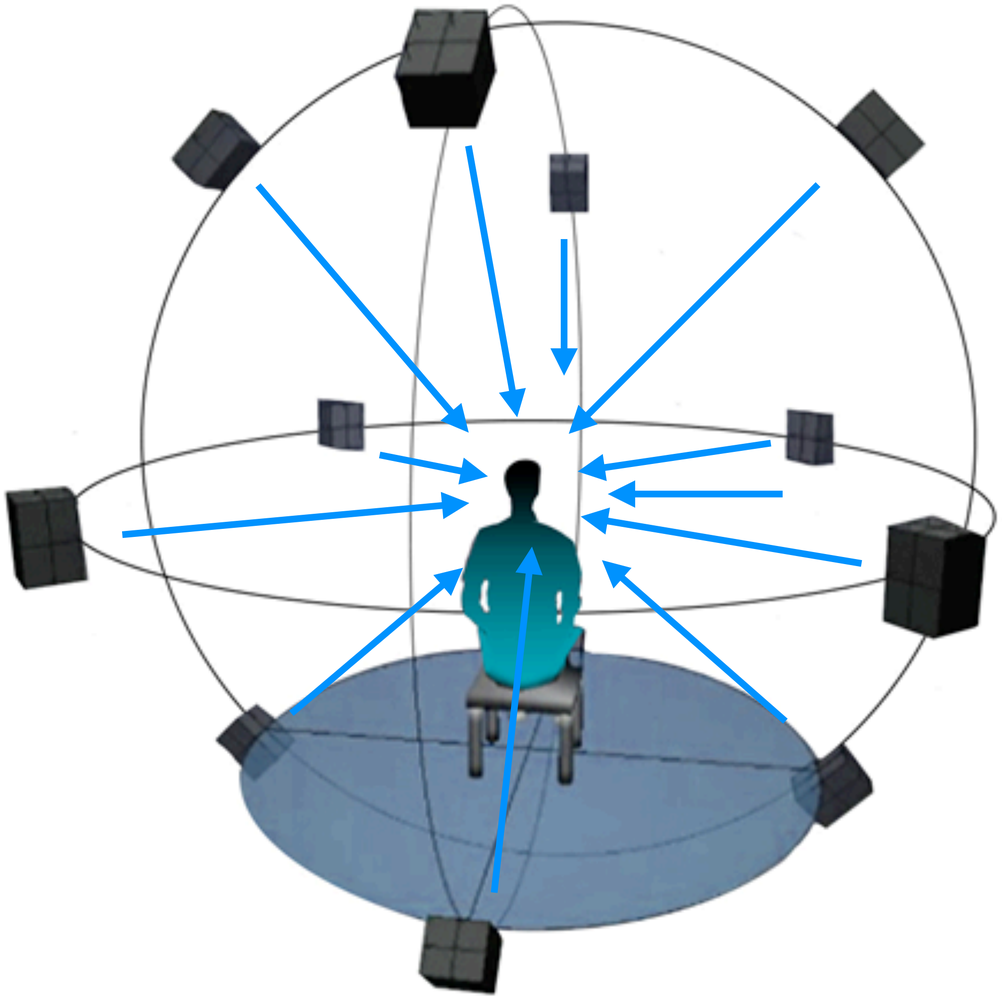
Download files to your computer - SD Card, USB cable

AMBISONIC AUDIO

Full-sphere surround sound format

Horizontal plane, above and below

TRADITIONAL VS AMBISONIC AUDIO



360 VIDEO EDITING PRE-PROCESSING

Ricoh Theta X

No processing needed - creates files in video format

Insta360 One X

Import .insv files to Premier
(Insta360 plugin installed with Insta360 Studio 2022)

360 POST-PRODUCTION

Edit in Desktop application (Insta360 Studio 2022)

Edit in Adobe Premiere

360 PUBLISHING

Spec	YouTube	Facebook
Format	.mp4, .mov	.mp4, .mov
Codec		H.264 (MPEG-4 AVC)
File Type	Equirectangular	Equirectangular
Aspect Ratio	2:1	2:1
Resolution	7168 x 3584 8192 x 4096	Up to 5120 x 2560
Framerate (FPS)	24, 25, 30, 48, 50, or 60	30

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QUESTIONS?