

How to Make Noise?

- Using Pepper (the humanoid robot):
 - Program Pepper to produce specific sounds or rhythms.
 - Use Pepper's built-in speakers for pre-recorded or synthesized sounds.
 - External Speakers:
 - Connect to Pepper or other devices for amplified soundscapes.
 - Play ambient sounds or music to set the tone (e.g., environmental noises, instrumentals).
 - People:
 - Encourage audience members to create sounds using their bodies or objects around them (e.g., clapping, stomping, humming).
 - Use participants as sound-makers in guided group activities.
 - Simple Instruments:
 - Distribute tambourines, shakers, or drumsticks for audience use.
 - Use instruments that are easy to play and intuitive for non-musicians.
 - Makeshift Instruments:
 - Incorporate unconventional items as instruments (e.g., water bottles, tin cans, cardboard boxes).
 - Demonstrate how these objects can produce different tones or rhythms.
 - Environment:
 - Utilize natural sounds from the venue (e.g., doors creaking, chairs moving).
 - Integrate sounds from audience interaction with the setting (e.g., slamming a door, tapping on tables).
 - Specific Sounds to Explore:
 - Boots stomping on the ground.
 - Drumbeats, either through traditional drums or improvised percussion.
 - Door slams or knocks as rhythmic or dramatic elements.
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How to Create Audience Interaction?

- Storytelling Participation:
 - Involve the audience in co-creating a narrative by suggesting plot points or dialog.

- Use call-and-response techniques to engage the audience in the story progression.
 - Playing Instruments:
 - Assign simple roles to audience members, like keeping a beat or playing along with a melody.
 - Create rhythm games where the audience follows Pepper's lead.
 - Using the Environment:
 - Encourage participants to interact with their surroundings (e.g., tapping on doors, moving chairs rhythmically).
 - Assign sound-making tasks, such as imitating wind or creating footsteps.
 - Physical Interaction:
 - Get the audience to stomp feet in unison or perform choreographed claps.
 - Facilitate a group activity that blends movement and sound.
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Generating a Script

- Tools and Approaches:
 - Use ChatGPT or similar tools to generate simple, interactive stories based on prompts.
 - Examples of prompts:
 - "Robots and humans work together to save the day."
 - "A quirky robot crew stages an old cowboy show."
 - "A futuristic meditation retreat where sounds guide mindfulness."
 - Story Themes:
 - Focus on themes of connection, playfulness, and mindfulness.
 - Explore lighthearted genres like comedic westerns or collaborative adventures.
 - Keep stories adaptable for interaction, leaving room for audience input.
 - Mindfulness Considerations:
 - Emphasize the environment and ambient experience over high-energy moments.
 - Use pauses, soundscapes, and soft dynamics to foster focus and relaxation.
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Audience Participation Strategies

- Pepper's Role:
 - Use gestures or verbal cues to invite audience interaction.

- Demonstrate sound-making actions that the audience can imitate.
 - Human Facilitators:
 - Designate a conductor or guide to coordinate participation.
 - Encourage collaborative moments where humans and robots work together.
 - Preparation:
 - Provide scripts or instructions beforehand to set expectations.
 - Hand out short prompts or sound-making tasks before the event.
 - Interactive Roles:
 - Divide the audience into groups with specific sound or storytelling roles.
 - Allow participants to take turns conducting Pepper or leading sound activities.
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Inspiration and Resources

- Soundcloud Example:
 - Reference or adapt themes from "[Robo Quadpups: An Avoidant Robot Christmas](#)."
 - Use the soundscape for inspiration when designing robot and environmental sounds.
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Next Steps

- Prototype noise-making setups with Pepper, audio systems, and simple instruments.
 - Test audience interaction activities in small groups to refine mechanics.
 - Create a brief participation guide for simple instruments?
 - Develop and iterate on scripts using AI, ensuring they align with the mindfulness theme.
 - Get an idea of how to collect sounds
 - Talk to robotic Marimba team
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Collecting sounds

Collected sounds would only be used by pepper or an audio system

- Make sounds using recording software (audacity, voice memos, rent a H4 from the media hub, etc)
 - Modify sound files (if needed)
 - Make sounds from random objects
 - Anything and everything could be used
 - Doors
 - Walls
 - Tables
 - Pipes
 - Puddles
 - Wood, metal, plastic
 - The key is being creative
 - Any weird sounds that catches your ear and you think you can replicate it
 - Record it
 - voice memos on a phone is shockingly good for this exact purpose
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Develop and iterate on scripts using AI

- ☰ Robot Hero's story
 - ☰ Robot wester radio
 - ☰ Stories with audience interaction
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Storytelling with sound

Storytelling with sound has many layers to it

1. Engaging Narrative Structure

- **Strong beginning:** Use sound to set the scene and capture attention right away. For example, a bustling marketplace or eerie forest can immediately transport the listener.
- **Rising tension:** Build layers of sound to heighten suspense or anticipation. A growing hum, overlapping whispers, or intensifying beats can signal impending action.
- **Climactic moments:** Silence or sharp, contrasting sounds can emphasize a dramatic turning point.
- **Resolution:** Gentle, harmonious tones can signal closure and leave the audience with a sense of completion.

2. Immersive Soundscapes

- **Ambience:** Background sounds establish the setting, such as waves for a beach, wind for a mountain, or city traffic for urban stories.
- **Directional audio:** Use stereo or 3D sound design to simulate movement and space, like footsteps passing by or a bird flying overhead.
- **Details:** Include subtle auditory cues—like creaking doors, rustling fabric, or distant thunder—to make scenes more vivid.

3. Characterization Through Sound

- **Voice acting:** Distinct voices, accents, and tones can define characters and convey their personalities.
- **Themes:** Assign specific instruments or sound motifs to characters, creating a recognizable auditory signature for each.
- **Emotion:** Voice inflection, pace, and pauses can communicate emotions like joy, fear, or sadness effectively.

4. Dynamic Music Integration

- **Themes and leitmotifs:** Use recurring melodies to tie characters, places, or ideas together.
- **Mood enhancement:** Adjust tempo, key, and instrumentation to match the emotional tone of the narrative.
- **Transitions:** Music can smooth shifts between scenes or provide a natural progression.

5. Emotional Engagement

- **Empathy triggers:** Use sounds that resonate emotionally, like a child laughing or a melancholy violin.
- **Contrast:** Juxtapose sounds (e.g., cheerful music against somber dialogue) to evoke complex feelings or highlight irony.
- **Rhythm and timing:** Sync sounds with story beats to amplify tension or release.

6. Minimalism and Silence

- **Strategic silence:** Pausing sound at key moments can create suspense or focus attention.
- **Selective sound:** Avoid overwhelming the listener by using only the most impactful sounds.

7. Interaction with the Listener

- **Engage imagination:** Leave some sounds ambiguous to let listeners fill in the gaps.
 - **Immersive POV:** Design sounds as if the listener is experiencing the story firsthand (e.g., hearing the protagonist's heartbeat in tense moments).
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