"Tunnels Galore" Project

Game Design Document

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1. Game Summary

The game is a single-player psychological horror experience in which the player started a job as the only lookout in the tunnels of the Paranapiacaba city to make sure tourists don't go out on trails at night. The work has more under the hood, sinister things like entities, a living fog, and a liminal space vibe. The player follows a strict routine (See 2.3 Core Loop below)

1.1 Game Design Pillars

1.1.1 Paranoia

The player is never certain if what they see or hear is real. Subtle visual, audio, and environmental changes create constant doubt.

1.1.2 Rules

Survival depends on discovering and respecting unwritten rules. These rules are learned through observation and failure and may not always be reliable.

1.1.3 Liminal Routine

The game is built around a repeating task that slowly loses its reliability. As the player performs the same nightly patrol, subtle inconsistencies emerge in the environment, space, and flow of time. Familiar paths feel unfamiliar, distances become unreliable, and routine actions no longer guarantee safety. The repetition creates comfort at first, then steadily erodes the player's trust in their own perception and memory.

1.2 User Experience

The player experience is designed to evoke isolation, uncertainty, and persistent unease through minimal guidance and subtle environmental storytelling. The game avoids explicit explanations, allowing the player to interpret events and rules through observation and repetition.

The core experience centers on performing a simple, repetitive task, patrolling the tunnels from end to end, back and forth, looking for any tourists that shouldn't be there, while gradually losing confidence in the reliability of the environment and perception. What once was comforting, like the familiar route back to the start, is slowly undermined throughout the game.

1.2.1 Emotional Journey

1. The player feels curious and "normal". Nothing out of the ordinary happens. The task is clear and simple, just like the environment itself, bringing this sense of routine and safety.
2. As the player repeats their patrols, the world around them begins changing slightly as unease settles in. Shadows appear and disappear quickly, sounds that don't make sense echo in the tunnels. These changes are never explained or acknowledged by the radio operator.

3. Fear emerges as doubt and the sense of constant threat begins to settle. The player is encouraged to question what is real, if they're doing anything right, and if they can trust anything.

1.2.2 Information and Clarity

Information is intentionally limited. Rules are not presented to the player directly and must be discovered through environmental cues and trial & error.

The game avoids traditional HUD elements, reinforcing immersion and preventing the player from relying on it for information.

1.2.3 Atmosphere and Immersion

Sound design plays a central role in the experience. Distant echoes, "blurred" noises and ambiguous sound cues blur the line between what's real and what isn't. Sound also brings information to the player, helping them when figuring the rules out.

The overall experience focuses on psychological dread over shock. It encourages the player to maintain immersed in the game until the end.

1.2.4 Player Agency

The player maintains full control over movement and pacing. The game doesn't rush the player. Tension is built naturally and the pacing the controlled by the fear factor.

2. Core Gameplay

2.1 Aim of the Game

Players go through a routine of patrolling the tunnels by walking from the start to the end of the line, then returning back to the start, experiencing increasing dread and doubt over reality throughout the night.

Not all events are deadly but all of them have a hidden logic that, if understood and respected, the player survives.

The primary objective is not only to survive, but to do your job, finding any tourists wandering around at night and collecting anything someone might've left behind. Success depends on observation and the ability to traverse through a somewhat hostile environment while maintaining focus.

2.2 Game Design Goals

1. Immersive Psychological Horror Experience
   - Create a short experience that the player will remember and quote when a similar game shows up. Make them feel like they are the ones with an unreliable perception, not the game that is tricking them.
   - Ensure that every threatening situation follows an internal logic, even if that logic is not immediately visible to the player.
   - Limit traditional UI elements wherever possible. Information should be communicated through the environment, sound and player observation.
2. High Quality Diegetic Sound Design
   - The sound in the game experience is vital to setting the scene and maintaining immersion.
3. High Environmental Interactivity
   - The player must be able to interact with the world in a high capacity.
     E.g.: picking up rocks, moving foliage walking through it, etc.
4. Subtle Variation and Replay Value
   - Encourage replayability through variation in events and in their order, and environmental behavior rather than branching narratives or difficulty. Each playthrough should feel similar but never identical.

2.3 Core Loop

1. Check-in at the entrance booth (clock card + radio check and listen for additional tasks from the operator).
2. Patrol along the rails, respond to the radio, search for wanderers/items and the additional tasks.
3. Turnaround at the end of the rail.
4. Patrol back to the entrance.
5. Report and file log.

2.3.1 Failure Condition

- Violation of an active rule → either disorientation or fatal event.
  - Quiet grading**:** "All accounted," "Time Slipped," "Rule Breach Noted," with a stamped ledger—no S/A/B ranks.

2.3.2 Success Conditions

- Locate X wanderers.
- Find Y items.
- Obey the rules
- Return before the fog catches up to you.

3. Features

3.1 Gameplay Mechanics

3.1.1 Disorientation

Happens when a rule is violated, a certain threshold is surpassed, or a specific action is done. Though the latter two should happen with a low frequency.

Disorientation effects include:

- Teleport back 50-100 meters.
- Elongation of a tunnel.
- Change in the environment (props/booths/markers are in different places)

3.1.2 Fatal Event

It is triggered by violating the threat's rule (fade to black → resume at last booth stamp with "time slip" consequences).

3.1.3 Unwritten Rules/Threats/Entities

- **The Living Fog**: If the fog rises and enters the tunnel, step onto the gravel shoulder and face the wall until it passes.
- **The Echo Man**: If footsteps echo *behind you* but your shadow doesn't change, do not turn; toss a rock backward.

3.2 Player Mechanics

3.2.1 Movement

- Walk
- Sprint (louder)

3.2.2 Tools

- Flashlight
- Radio
- Etc

3.2.3 Interactions

- Inspect
- Pick up
- Place
- Toss
- Mark (chalk)
- Listen (hold to amplify hearing)

4. Audio Design

4.1 Goals

Audio is the primary information layer and the emotional driver of the game. It communicates the rules, shapes space and sustains dread without relying on a HUD.

4.1.1 Audio Design Pillars

- **Truth vs. Deception:** Some sounds are trustworthy beacons, others are lures. Players learn which to obey through repetition.

- **Spatial Honesty:** Tunnels must *sound* physically coherent (length, curvature, materials) so that subtle anomalies are felt as wrong.

- **Diegetic UI:** Time pressure, status, and hints are delivered as environmental or device sounds (watch tick drift, lantern shutter hiss thresholds) rather than overlays.

- **Low Noise, High Signal:** Avoid constant bed clutter. Every new layer must convey state change, distance, or risk.

4.1.2 Player Promises

- If you listen, you can survive.

- If you misinterpret, you will slip (time drift, loops, or worse).

4.2 Sound Palettes by Environment

Each segment along the patrol has a curated palette: ambience bed (loop), periodic details (semi-random one-shots), and truth cues (stable identity sounds). Beds should be minimal—let details and cues carry meaning.

4.2.1 Entrance Booth & Yard

- **Bed:** distant generator thrum, light wind, faint night insects (early nights only).

- **Truth cue:** Clock stamp (dry, close), radio squelch (clean, bureaucratic).

- **Purpose:** Safe tonality; establishes "normal" spectral balance and dynamic range.

4.2.2 Brick Drift Tunnel

- **Bed:** low ventilation, occasional water drips, rail resonance (~110–180 Hz fundamental).

- **Truth cue: Rail hum** (stable pitch = reality aligned).

- **Variations:** Subtle comb-filter "flutter" near curves; emphasize when anomalies begin.

4.2.3 Drain Chamber

- **Bed:** shallow water slapback, pipe rattle.

- **Truth cue:** Reflection check (player stomp or rock splash returns on tempo if space is honest).

- **Interaction:** Footstep type changes with depth; ducking affects reverb brightness.

4.3 Systems & Mixing

4.3.1 Bus Architecture (top-level)

- **Master:**

    o   Music/Drone (rare, mostly tonal beds)

    o   Ambience (beds + periodic one-shots)

    o   Foley (player + props)

    o   Entities (mimic, echo, fog voices/gestures)

    o   Devices (watch, lantern, radio)

    o   VO/Radio (operator)

- **Sidechains:**

    o   *Entities duck Ambience* (so threats read).

    o   *Devices sidechain Entities* lightly (truth devices cut through deception).

    o   *Fog Chorus ducks everything* within proximity snapshot (panic effect, careful not to over-compress).

4.3.2 Mix Snapshots (state machine)

- **Safe Patrol:** wide DR, rail hum clear, -0 dB trims.

- **Tension (pre-event):** +2 dB Entities bus, +1 dB reverb send, -1 dB Ambience.

- **Fog Proximity:** LPF on non-fog buses (~1.8–2.2 kHz), rail hum attenuated, subtle warble on watch tick.

- **Entity Encounter:** transient headroom preserved; short release on ducking to keep articulation.

- **Disorientation Loop:** narrow stereo image, slight pre-delay misalignment, rail hum detuned −20 to −35 cents.

- **Aftermath:** slow recovery to Safe over 6–10 s.

4.3.3 Distance, Occlusion & Curvature

- **Distance rolloff:** hybrid linear → log for predictability in long corridors.

- **Occlusion:** geometry-aware low-pass (12 dB/oct), add diffused early reflections rather than muting completely.

- **Curvature cue:** introduce a mild comb filter as sounds travel around bends (flutter echo at ~20–50 ms intervals).

4.3.4 Reverb & IRs

- Per-segment IRs (short, medium, long) with crossfaded sends at transitions.

- **Rule:** truth cues use early reflections + shorter tails, so they remain intelligible; deception sounds love smeared tails.

4.3.5 Loudness & Headroom

- **Maintain consistent relative loudness:** Devices and Truth cues should be clearly audible over beds at walking speed.

- Preserve transient headroom (~6 dB) for frights without brick-walling; avoid global limiters as design crutches.

4.4 Motifs & Rule Telemetry (Cue Taxonomy)

4.4.1 Rail Hum

- **Meaning:** Space/time aligned.

- **Behavior:** Stable pitch; slight amplitude modulation on long stretches.

4.4.2 Fog Chorus (Hazard).

- **Meaning:** The living fog is near; stop, face wall per rule.

- **Behavior:** Clustered, breath-like band around 300–700 Hz; proximity increases width and adds low LPF to other buses.

4.4.3 Echo Man (Don't Turn).

- **Meaning:** Footsteps behind the player without corresponding shadow change.

- **Behavior:** Back-biased convolution; if player turns, smear and gain ramp → threat.

4.4.4 Red Lantern (Deception).

- **Meaning:** False wayfinding.

- **Behavior:** Hiss carries a faint 50/60 Hz hum when fake; real lantern hiss is wideband with occasional sputter—teachable difference.

4.4.5 Whistle (One Use).

- **Meaning:** Summons help or the mimic, based on rule state.

- **Behavior:** Real help returns a **distant two-tone** after 1.5–2.0 s; mimic returns an **immediate perfect imitation** slightly right-biased.

4.4.6 Lantern Shutter (Status).

- **Meaning:** Brightness threshold; over-bright triggers attention.

- **Behavior:** Hiss pitch scales with aperture; crossing a threshold adds a faint ring— player learns to stay below it.

Watch Tick (Time Integrity).

- **Meaning:** Tempo equals reality pace.

- **Break:** Drift or flam at turnarounds indicates time slip; fixes at Terminus ritual.

4.5 Variation & Seeding

- **Night Seed:** Each patrol night gets a fixed seed to shuffle **event order** (periodic one-shots, mimic appearances) without breaking logic.

- **Micro-Variants:** Alternate takes (A/B/C) for drips, pebble rolls, and distant clangs with weighted probabilities.

- **Cooldowns:** Minimum spacing for lures so players can parse meaning (e.g., at least 12–20 s between mimic attempts).

5. Game World

5.1 Environments WIP

5.2 Characters

- The Lookout (Player)
    - New hire
- Radio Operator
    - Veteran
    - Introduces the player to the paranormal
- Wanderers (tourists)
- Entities (see 3.1Gameplay Mechanics)

6. UI/UX Design

6.1 Minimal HUD

6.1.1 Wristwatch

Shows how much time has passed since the clock in. occasionally desyncs if rules are broken. (See 3.1.3 Unwritten Rules/Threats/Entities above)

6.1.2 Logbook

Rule hints post-run and upon death, all stamped by the radio operator.

6.1.3 Flashlight

The flickering indicates danger in near.