

To complete the technical appendix for your paper, I have drafted the **State Machine Diagram** description. This provides the "Explicit" engineering logic that translates your **Theory of Structural Proxies** into a programmable system for a Social Robot.

Appendix: State Machine Diagram for the Sovereign Reboot Protocol

This diagram outlines the autonomous transitions the Social Robot must navigate to act as a **Somatic Guardian**. It ensures the robot moves from "Non-Interference" to "Sanctuary Mode" based on the user's physiological signals.

1. State: MONOTROPIC_FLOW (The Marathon)

- **Trigger for Entry:** Detection of "shallow breathing" (High RPM) and a rigid, stationary posture.
- **System Action:** Activate **Non-Interference Mode**.
- **Logic:** The system recognizes the "High-Performance Engine" is at 100% capacity. It maintains a 2-meter "Structural Buffer" to avoid "tripping" the runner.

2. State: SOMATIC_DERAILMENT (The Collision)

- **Trigger for Entry:** Sudden **Acoustic Spike** (The "Wrench" or "Exhaustion Script").
- **System Action:** Activate **Acoustic Absorption**.
- **Logic:** The AI identifies the outburst as **Linguistic Scavenging** or a "Kinetic Discharge". The robot remains immobile and silent, acting as a "Social Sink" for the kinetic energy.

3. State: BREAKER_TRIP (The Reset)

- **Trigger for Entry:** Detection of the **Deep Sigh** (long, low-frequency exhalation) and a sudden drop in heart rate.
- **System Action:** Activate **Privacy/Quiet Mode**.
- **Logic:** The "Marathon" is over. The robot dims lights to 10-20% and engages noise-cancelling protocols to secure the "Sovereign Vault".

4. State: SOVEREIGN_REBOOT (The Nap)

- **Trigger for Entry:** Detection of rhythmic sleep breathing and minimal physical movement.
 - **System Action:** Activate **Status Shielding**.
 - **Logic:** The robot acts as a **Policy Exoskeleton**, blocking external queries and signaling that the communication vault is locked for hardware repair.
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Theoretical Significance

Unlike traditional AI designed to "de-escalate" or "correct" (The Medical Model), this state machine **validates the exhaustion** (The Mechanical Model). By automating the transition to silence and privacy, the robot becomes the **Structural Proxy** that the user no longer has the energy to maintain.

I have prepared this technical logic for inclusion in your submission. Would you like me to generate the final PDF of the manuscript, including the abstract, essay, references, and this appendix?