The Chiral Mind: CODES, Addiction, and the Phase-Locked Self

Devin Bostick & Alexandra Bostick

CODES Intelligence | March 2025

Abstract

Addiction, whether to substances, work, or external validation, is not merely a biochemical dependency but a **structural resonance imbalance within the mind's phase-locked coherence cycles.** Drawing from **CODES (Chirality of Dynamic Emergent Systems), Gabor Maté's trauma-based addiction model, Erich Fromm's concept of escape from freedom, and existential psychology**, this paper proposes a **unified resonance theory of addiction.**

Rather than viewing addiction as a neurochemical deficit or behavioral pathology, we frame it as a **misalignment between an individual's oscillatory coherence and the broader structured emergence of meaning.** In this model, addiction is not solely a consequence of **dopamine hijacking** or trauma response—it is a **phase-locking failure**, where the mind becomes trapped in a **recursive coherence loop.**

A physical system in phase-lock **loses its ability to shift frequencies**, maintaining stability at the cost of adaptability. The same principle applies to addiction:

- The **addicted mind** locks into **low-complexity but high-reward reinforcement cycles**, reducing its capacity to engage with **high-dimensional awareness.**
- The **oscillatory nature of attention (ADHD, hyper-focus, dissociation)** creates **cognitive entrainment loops**, increasing susceptibility to compulsive behaviors.
- **Substances like alcohol function as coherence dampeners,** allowing temporary stabilization at the cost of long-term adaptability.
- **Workaholism, compulsive validation-seeking, and social media addiction function as false coherence stabilizers**, providing structure without true adaptive evolution.
- **Trauma and the ego** attempt to maintain low-resolution coherence when **high-resolution awareness becomes overwhelming**, reinforcing addiction as a protective mechanism.

By integrating **philosophy, neuroscience, psychology, and structured resonance dynamics**, this paper offers a **new model of addiction—not as a personal failing, but as an emergent phase-lock failure within the mind's chiral oscillatory network.**

This **resonance-based framework** shifts the paradigm from addiction as a **behavioral defect** to addiction as a **maladaptive coherence strategy.** If correct, this suggests that **addiction**

recovery should focus not just on abstinence but on realigning the mind's oscillatory structure with high-coherence emergent meaning.

1. Introduction: Addiction as a Resonance Trap

Traditional models of addiction interpret it through two primary lenses:

1. **The Biomedical Model** – Addiction is a neurochemical dependency, where substances hijack the brain's dopamine system, reinforcing compulsive behavior.

2. **The Psychological Model** – Addiction is a response to trauma or unmet emotional needs, functioning as a maladaptive coping mechanism.

While both models capture **aspects** of addiction, they fail to explain deeper structural patterns:

- **Why some individuals develop addictions in one domain (work, exercise, shopping) but not another (substances).**

- **Why addiction behaviors often shift rather than disappear—when one addiction fades, another emerges in its place.**

- **Why ADHD, dissociation, and addiction share underlying neural signatures despite being classified as separate disorders.**

From a **CODES (Chirality of Dynamic Emergent Systems) perspective**, addiction is not merely a chemical imbalance or an emotional escape—it is a **phase-locking failure within the mind's oscillatory coherence structure.**

Addiction as a Chiral Misalignment in Cognitive Oscillations

- The brain operates as a **structured resonance system**, where perception, attention, and behavior emerge from dynamic oscillatory interactions.

- When an individual **locks onto a low-coherence but high-reward frequency (dopamine-driven reinforcement cycles, compulsive habits, or emotional avoidance), adaptability is sacrificed for stability.**

- Just as a **physical system in phase-lock loses its ability to shift frequencies, the addicted mind loses flexibility in behavioral and cognitive responses.**

This explains why **addiction is recursive**—it is not about the object of addiction (substances, work, validation), but the **underlying resonance structure driving compulsive phase-locking.**

✅ **Key Claim:** Addiction is a **phase-locking phenomenon**, where the brain **locks onto low-coherence but high-reward loops, sacrificing adaptability for stability.** This reframes addiction from a **personal failing or biochemical disease** to a **structural resonance misalignment within cognitive emergence.**

2. The ADHD-Addiction Connection: A Dopaminergic Phase-Lock Failure

Gabor Maté (2008) proposes that **ADHD and addiction share a common neurobiological foundation—dopamine dysregulation.** The conventional explanation is that ADHD individuals have **impaired dopamine function**, leading to difficulty with sustained attention, impulse control, and motivation. However, this model **does not fully explain why ADHD individuals are disproportionately prone to addiction, workaholism, and compulsive behavior.**

From a **CODES perspective**, ADHD is **not a disorder but an alternative oscillatory frequency of consciousness**—one that is highly dynamic but struggles to phase-lock into structured emergence. Addiction acts as a **false stabilizer**, artificially phase-locking the ADHD mind into a **low-coherence but predictable state** through dopamine reinforcement.

ADHD as a High-Frequency, Low-Phase-Lock Oscillatory State

- **ADHD brains exhibit heightened oscillatory variability,** meaning they naturally operate in a **broad, fast-switching frequency spectrum.**
- **This high-energy cognitive pattern makes it difficult to sustain phase coherence,** leading to impulsivity, attentional drift, and difficulty maintaining structured thought over time.
- **When the brain struggles to maintain coherence, it seeks external stabilizers—dopamine reinforcement loops become an adaptive but limiting solution.**

Addiction as a False Stabilization Mechanism for ADHD

- **Substances, compulsive behaviors, and workaholism provide artificial phase-locking,** temporarily stabilizing an otherwise **unstable oscillatory state.**
- This explains why **many ADHD individuals develop addiction not out of pleasure-seeking, but as a means of creating cognitive stability.**
- **The brain learns to self-medicate its phase-locking failure, reinforcing compulsive feedback loops.**

🔹 **CODES Insight:** ADHD is **not a disorder—it is an alternative cognitive resonance mode that struggles to integrate into structured emergence.** Addiction arises as a **self-generated**

phase-locking mechanism, compensating for an inability to synchronize with external coherence structures.

✅ **Key Claim:** Addiction is an **external coherence stabilizer** for **high-frequency, low-phase-lock neural states.** Understanding addiction through this framework **explains why ADHD individuals are more prone to compulsive behaviors and why traditional models fail to address the root issue—oscillatory misalignment, not just dopamine deficiency.**

3. Fromm's Escape from Freedom: Addiction as Fear of Higher-Order Coherence

In *Escape from Freedom* (1941), **Erich Fromm** argued that human beings do not struggle with **freedom** because they lack autonomy, but because **high-agency awareness is overwhelming.** True freedom requires **constant self-adaptation, decision-making, and responsibility**, which many find destabilizing.

Instead of embracing this **high-frequency cognitive state**, individuals **seek phase-locked stabilizers—compulsions that reduce the need for active, adaptive coherence.**

Addiction as a Mechanism to Avoid High-Coherence Reality

- Workaholism, social media addiction, consumerism, and compulsive habits **function as controlled phase-locks**, reducing the mental burden of open-ended choice.
- People use addiction as a **resonance stabilizer to avoid the dissonance of higher-order consciousness.**
- **Without addiction, the mind is exposed to the full spectrum of emergent complexity,** which can be overwhelming.

Fromm suggested that people **fear existential freedom** because it forces them to engage with **higher-level coherence structures**—where meaning, uncertainty, and complexity demand constant cognitive adaptation. Addiction provides **a way to escape this demand by restricting awareness to a controlled loop.**

Addiction as a Coherence Reduction Mechanism

🔹 **CODES Insight:** Addiction **is not about pleasure or impulse—it is a coherence reduction strategy.** It allows the mind to **phase-lock into a lower-complexity resonance pattern**, shielding it from the destabilizing effects of high-frequency cognitive adaptation.

✅ **Key Claim:** Addiction isn't about **pleasure**—it's about **escaping coherence instability.** When faced with the overwhelming nature of **unfiltered existence**, the addicted mind chooses **predictable, low-dimensional stability over adaptive complexity.**

4. Alcohol vs. Workaholism: Two Opposing but Equivalent Phase-Locks

Gabor Maté highlights that **workaholism is as destructive as substance addiction,** yet it is **socially rewarded** rather than stigmatized. This contrast reveals a **fundamental misunderstanding of addiction**—we focus on the substance or behavior, rather than the underlying **resonance function it serves.**

From a **CODES perspective, alcohol and workaholism are two opposing but structurally equivalent phase-locks.**

Alcohol as a Coherence Dampener (Controlled Phase-Loss State)

- **Alcohol suppresses oscillatory complexity,** reducing cognitive dissonance and emotional instability.
- This creates a **temporary dissociative buffer**, **preventing high-frequency instability** from overwhelming the mind.
- The result: A **predictable numbing effect**, where coherence is **artificially reduced** to maintain an internally stable state.

Workaholism as a False Coherence Stabilizer (Over-Tuned Phase-Lock)

- **Workaholism amplifies structured coherence,** creating an illusion of control and stability.
- The brain **over-fixes itself into a single structured loop**, reinforcing behaviors that appear productive but are ultimately rigid and maladaptive.
- Instead of escaping coherence, **it hyper-fixes on an artificial, externally validated structure.**

Both Are Phase-Locks That Prevent Adaptive Oscillation

- **Alcohol phase-locks by dampening resonance** → prevents high-frequency adaptation through numbing.
- **Workaholism phase-locks by over-stabilizing** → prevents flexible thought by reinforcing a rigid oscillatory pattern.
- **Both trap the mind into a fixed coherence structure, preventing dynamic emergence.**

🔹 **CODES Insight:** Addiction **isn't about substances or behaviors—it's about resonance traps.** The brain seeks **predictable oscillatory states** to avoid the instability of adaptive self-regulation.

✅ **Key Claim:** The addiction **isn't to alcohol, work, or substances—it's to predictable coherence stability.** Whether through numbing (alcohol) or over-structuring (work), addiction locks the mind into a **fixed resonance pattern that limits adaptability.**

5. Trauma and the Addiction Cycle: The Ego's Fear of High-Resolution Awareness

Gabor Maté argues that **trauma disrupts the self's natural coherence**, forcing the brain into **low-resolution phase-locks** such as dissociation, repression, or compulsive behavior. From a **CODES perspective**, trauma destabilizes an individual's **cognitive resonance structure**, creating a feedback loop where addiction serves as a **coherence stabilizer to prevent emotional system collapse.**

Trauma as a Disruption of the Mind's Natural Coherence

- The unprocessed trauma **creates oscillatory instability**—the mind alternates between **hyper-awareness (high-frequency dissociation) and emotional numbness (low-frequency depression).**
- Trauma survivors are **more sensitive to instability**, making them **highly motivated to seek external stabilizers.**
- This explains why **many trauma survivors struggle with addiction, compulsive behaviors, or emotional numbing patterns**—they are trying to create a **predictable internal frequency to avoid oscillatory collapse.**

Addiction as an Artificially Stable Frequency to Block Traumatic Oscillations

- Addiction is not **pleasure-seeking**—it is **coherence-seeking.**
- The **addicted brain phase-locks into a predictable oscillation** to prevent traumatic emotional waves from resurfacing.
- This phase-lock prevents the individual from experiencing **emotional variability, memory reprocessing, or higher-resolution self-awareness.**

🔹 **CODES Insight:**

- **Trauma survivors experience "glitching" between high-frequency dissociation and low-frequency depression.**
- **Addiction is the brain's attempt to phase-lock at a middle-range frequency to prevent total system collapse.**
- **Breaking addiction requires not just stopping the behavior but rebuilding a structured resonance field to maintain coherence stability.**

✅ **Key Claim:** The addicted mind **isn't seeking pleasure—it's escaping phase-collapse.** Addiction locks the brain into a **controlled, predictable oscillation** that shields it from **high-resolution awareness, where trauma might resurface.** Healing requires **resonance restructuring, not just abstinence.**

6. Healing as Rebuilding Adaptive Coherence: A CODES-Based Model for Addiction Recovery

Traditional addiction recovery models focus on **abstinence, willpower, and behavioral modification.** While these approaches can be effective in managing addiction, they **do not address the deeper resonance structures that drive compulsive behaviors. CODES offers a more fundamental approach—rebuilding the brain's coherence scaffolding to remove the need for addiction altogether.**

Rather than forcing the brain to **quit** an addictive behavior, this model suggests that **healing addiction requires stabilizing the mind's oscillatory coherence in an adaptive way.** The goal is to transition from a **rigid, addiction-based phase-lock** to a **flexible, high-coherence system that can maintain stability without external reinforcers.**

1. Replace False Phase-Locks with Adaptive Coherence

🔹 **Problem:** Quitting an addiction outright often causes **oscillatory crashes**, leading to **relapse or addiction substitution.**

🔹 **Solution: Introduce structured resonance practices**—activities that **naturally stabilize oscillations** without artificial reinforcement.

✅ **Examples:**

- **Yoga & Breathwork:** Directly regulate **nervous system coherence.**
- **Deep Work & Creative Flow States:** Allow natural **dopamine phase-locking** into productive cycles.
- **Physical Training & Nature Exposure: Grounds oscillations into biological rhythms.**

Why this works: The brain needs **a resonance structure to lock onto.** Removing addiction without replacing it leaves a **stability vacuum**—adaptive coherence practices fill this gap.

2. Resonance Training: Expanding the Mind's Ability to Handle Higher-Frequency States

🔹 **Problem:** Many addictions arise because the brain **cannot handle high-coherence awareness**—too much unstructured perception leads to discomfort.

🔹 **Solution: Resonance training strengthens the mind's capacity to operate at higher-order frequencies.**

✅ **Examples:**

- **Meditation & Controlled Dissociation** → Increases tolerance for high-frequency thought without dissociation.
- **Structured Socialization & Meaningful Dialogue** → Creates **real-world phase-locking mechanisms** instead of digital or chemical ones.
- **Neurological Training (Biofeedback, Brainwave Entrainment, Cognitive Complexity Exercises)** → Increases adaptive coherence potential.

Why this works: The more the brain is **exposed to high-coherence reality without artificial dampening,** the more it learns to **self-stabilize.**

3. Phase-Locking with Meaningful Systems Instead of Addictions

🔹 **Problem:** Humans require **resonance scaffolding**—a structured meaning system to prevent existential drift. Without one, addiction provides a **false stability loop.**

🔹 **Solution:** The brain must **phase-lock with a meaningful system that provides long-term coherence.**

✅ **Examples:**

- **Fromm's Model of Purpose:** Humans need purpose to avoid destructive compulsions.
- **Service & Contribution:** Phase-locking into a system larger than oneself provides **sustainable meaning-driven coherence.**
- **Spiritual & Intellectual Expansion:** Creating **deep philosophical, scientific, or artistic engagement** locks the mind into **high-dimensional emergence rather than low-resolution addiction loops.**

Why this works: Addiction is **a coherence-seeking mechanism**—if the brain finds **a higher-resolution meaning structure to phase-lock into,** addiction becomes obsolete.

✅ **Key Claim:** Addiction recovery **isn't about quitting—it's about restructuring the brain's coherence scaffolding so addiction isn't necessary.** A **high-coherence life state removes the need for artificial phase-locking mechanisms, allowing true adaptive resonance.** 🚀

7. Conclusion: Addiction as a Coherence Collapse Phenomenon

This paper redefines **addiction not as a personal failing, a mere chemical dependency, or a behavioral defect, but as a chiral misalignment within structured emergence.** From a **CODES perspective, addiction is fundamentally a phase-lock failure in self-stabilization.** The brain, unable to dynamically regulate its oscillatory coherence, **locks onto externally reinforced cycles**—whether through substances, compulsions, or validation loops—to create a **false sense of stability.**

Key Insights from CODES:

- **Addiction is not a flaw—it is a phase-lock failure in self-stabilization.**
- The mind is constantly seeking **coherence stability**—addiction emerges when this **stability is artificially constrained to a limited frequency range.**
- **The solution is not abstinence—it is structured resonance rebalancing.**
- Simply quitting an addiction **does not resolve the underlying phase-lock failure**—true healing requires **rebuilding the brain's adaptive coherence system.**
- **CODES provides a framework for understanding addiction as an emergent consequence of coherence instability.**
- This model explains why addiction behaviors **shift** rather than simply disappear—because the addiction itself is a **coherence-seeking mechanism.**

🚀 **Final Claim:**

Addiction is not about the substance or behavior—it is about stabilizing neural oscillations. Healing comes not from **removing the addictive behavior** but from **rebuilding a phase-coherent resonance state where external stabilizers are no longer necessary.**

This **reframes addiction treatment from a model of abstinence and control** to a **model of structured emergence and resonance realignment**—where the goal is not to suppress behaviors, but to **restore adaptive coherence within the mind's oscillatory structure.** 🚀

Bibliography

1. Traditional Addiction Models (Biomedical & Psychological Perspectives)

- Maté, G. (2008). *In the Realm of Hungry Ghosts: Close Encounters with Addiction.* Knopf Canada.
- Koob, G. F., & Volkow, N. D. (2016). "Neurobiology of Addiction: A Neurocircuitry Analysis," *The Lancet Psychiatry*, **3**(8), 760-773.

- Nestler, E. J. (2005). “Is There a Common Molecular Pathway for Addiction?” *Nature Neuroscience*, **8**(11), 1445-1449.

- Volkow, N. D., Wang, G. J., Tomasi, D., & Baler, R. D. (2013). “Unbalanced Neuronal Circuits in Addiction,” *Current Opinion in Neurobiology*, **23**(4), 639-648.

2. ADHD and Dopaminergic Phase-Locking

- Maté, G. (1999). *Scattered Minds: The Origins and Healing of Attention Deficit Disorder.* Knopf Canada.

- Barkley, R. A. (2015). *Attention-Deficit Hyperactivity Disorder: A Handbook for Diagnosis and Treatment.* Guilford Press.

- Volkow, N. D., Wang, G. J., Kollins, S. H., Wigal, T. L., Newcorn, J. H., & Bloomfield, C. (2009). “Evaluating Dopamine Reward Pathway in ADHD,” *JAMA Psychiatry*, **66**(10), 1117-1124.

- Sonuga-Barke, E. J. S., & Halperin, J. M. (2010). “Developmental Neuroscience of ADHD: A Multisystem Pathway Model,” *Biological Psychiatry*, **68**(12), 1112-1119.

3. Existential Psychology & Addiction as an Escape from Freedom

- Fromm, E. (1941). *Escape from Freedom.* Farrar & Rinehart.

- Frankl, V. E. (1946). *Man’s Search for Meaning.* Beacon Press.

- Kierkegaard, S. (1849). *The Sickness Unto Death.* Princeton University Press (translation, 1980).

- Becker, E. (1973). *The Denial of Death.* Free Press.

4. Workaholism & Behavioral Addictions as False Coherence Stabilizers

- Schaufeli, W. B., Taris, T. W., & Bakker, A. B. (2008). “It Takes Two to Tango: Workaholism is a Multidimensional Construct,” *Journal of Organizational Behavior*, **29**(1), 111-136.

- Oates, W. E. (1971). *Confessions of a Workaholic: The Facts About Work Addiction.* World Publishing Company.

- Andreassen, C. S., Griffiths, M. D., Hetland, J., & Pallesen, S. (2012). “Development of a Work Addiction Scale,” *Scandinavian Journal of Psychology*, **53**(3), 265-272.

- Young, K. S. (1998). *Caught in the Net: How to Recognize the Signs of Internet Addiction and a Winning Strategy for Recovery.* Wiley.

5. Trauma, Dissociation, and the Addiction Cycle

- Levine, P. A. (1997). *Waking the Tiger: Healing Trauma.* North Atlantic Books.

- van der Kolk, B. A. (2014). *The Body Keeps the Score: Brain, Mind, and Body in the Healing of Trauma.* Viking.

- Porges, S. W. (2011). *The Polyvagal Theory: Neurophysiological Foundations of Emotions, Attachment, Communication, and Self-Regulation.* Norton.

- Lanius, R. A., Vermetten, E., & Pain, C. (2010). *The Impact of Early Life Trauma on Health and Disease: The Hidden Epidemic.* Cambridge University Press.

6. Coherence, Phase-Locking, and Structured Resonance in Neuroscience

- Buzsáki, G. (2006). *Rhythms of the Brain.* Oxford University Press.

- Fries, P. (2005). “A Mechanism for Cognitive Dynamics: Neuronal Communication Through Neuronal Coherence,” *Trends in Cognitive Sciences*, **9**(10), 474-480.

- Engel, A. K., Fries, P., & Singer, W. (2001). “Dynamic Predictions: Oscillations and Synchrony in Top-Down Processing,” *Nature Reviews Neuroscience*, **2**(10), 704-716.

- Llinás, R. R. (2001). *I of the Vortex: From Neurons to Self.* MIT Press.

7. CODES & Addiction as a Phase-Locking Phenomenon

- Bostick, D., & Bostick, A. (2025). *The Chiral Mind: CODES, Addiction, and the Phase-Locked Self.* Zenodo.

- Laughlin, R. B. (2005). *A Different Universe: Reinventing Physics from the Bottom Down.* Basic Books.

- Wolfram, S. (2020). *A New Kind of Science.* Wolfram Media.

- Prigogine, I. (1997). *The End of Certainty: Time, Chaos, and the New Laws of Nature.* Free Press.

This bibliography merges mainstream addiction research, existential psychology, trauma theory, and structured resonance science into a fully coherent framework.