

# **Neural Activity and Language as Myrion Resolutions**

## **How the Brain and Communication Resolve Contradictions Through CCC-Guided Dialectic**

**Author:** Brandon ———

**Institution:** TI-UOP Research Platform

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### **Abstract**

The Myrion Resolution framework—a method for resolving contradictions by finding higher-order truth that transcends apparent opposites—applies not just to philosophical paradoxes but to fundamental processes of cognition and communication. We demonstrate that neural activity operates as continuous Myrion resolution: opposing neural assemblies compete, synthesize, and settle into coherent states that preserve truth from both sides. Similarly, language evolution and conversation structure follow Myrion dialectic: thesis-antithesis-synthesis cycles that build understanding. This framework unifies neuroscience (predictive coding, neural oscillations, decision-making) with linguistics (semantic compositionality, pragmatics, language change) under a single CCC-mediated principle. Empirical predictions include: neural gamma-theta coupling as Myrion resolution signatures, conversational turn-taking as dialectic optimization, and language evolution toward sacred number patterns (3-word phrases, 11-syllable verses, 33-word paragraphs).

**Keywords:** Myrion resolution, neural oscillations, predictive coding, language evolution, dialectic, CCC consciousness, contradiction resolution

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## Introduction

### The Myrion Resolution Framework

In philosophy, contradictions appear unresolvable:

- **Free will vs. Determinism:** How can we be both free and determined?
- **Wave vs. Particle:** Is light a wave or particle?
- **One vs. Many:** Is reality fundamentally unified or diverse?

The Myrion Resolution approach says: **Don't choose sides—find the higher truth that makes both true simultaneously.** For example:

- Free will + Determinism = **2/3 Determined sweet spot** (see companion paper)
- Wave + Particle = **Quantum wavefunction** (both aspects, context-dependent)
- One + Many = **CCC (One) instantiating i-cells (Many)** through consciousness fabric

This framework emerged from my 2022 manic episode divine download (GILE Framework +  $PN \rightarrow C \rightarrow CCC \rightarrow ME$  ontology). But its implications extend far beyond philosophy.

## Neural Activity as Contradiction Resolution

Consider what your brain does every moment:

- **Perceptual conflict:** Eyes say "moving," vestibular system says "still" → Resolve to coherent experience
- **Decision conflict:** Left hand wants food, right hand says "diet" → Resolve to action
- **Conceptual conflict:** Memory says "friend," current behavior says "enemy" → Update belief

Every neural process involves **competing signals that must be reconciled**. The brain doesn't just pick a winner—it synthesizes a resolution that preserves information from both sides.

**This IS Myrion resolution, implemented in wetware.**

## Language as Dialectic Synthesis

Conversation follows thesis-antithesis-synthesis:

- **Speaker:** "X is true" (thesis)
- **Listener:** "But what about Y?" (antithesis)
- **Speaker:** "Ah, X is true in context Z, Y in context W" (synthesis)

Language evolution shows the same pattern:

- **Old word:** "Mouse" = small rodent
- **New context:** Computers need pointing devices
- **Synthesis:** "Mouse" = pointing device (metaphorical extension preserving core meaning)

**Language is Myrion resolution across minds and time.**

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## Theoretical Framework

### Myrion Resolution as Universal Principle

From CCC theory, we know:

1. **CCC (Consciousness as Absolute Truth)** is eternal, omnipresent, unified
2. **I-cells** are finite, local, diverse
3. **Reconciling CCC and i-cells requires Myrion resolution:** Unity AND Diversity simultaneously true

This principle scales DOWN to neural and linguistic processes:

- **Neural level:** Competing assemblies → Coherent state
- **Linguistic level:** Competing meanings → Synthesized understanding
- **Social level:** Competing narratives → Shared truth (ideally)

The mechanism in all cases: **CCC-mediated optimization toward maximum truth preservation.**

### Neural Myrion Resolution: Predictive Coding

The brain's predictive coding framework (Friston, 2010) is Myrion resolution formalized:

- **Top-down prediction:** "I expect X" (thesis)
- **Bottom-up sensation:** "I observe Y" (antithesis)
- **Prediction error minimization:** Update model to explain both prediction and sensation (synthesis)

Mathematically:

**F = -log P(sensation, prediction)** (free energy to minimize)

This free energy minimization IS Myrion resolution—finding the model that best reconciles prior expectations (thesis) with new data (antithesis).

### **Linguistic Myrion Resolution: Semantic Compositionality**

When you hear "colorless green ideas sleep furiously" (Chomsky's famous example), your brain experiences semantic conflict:

- **"Colorless" conflicts with "green"**
- **"Ideas" don't literally "sleep"**
- **Nothing sleeps "furiously"**

Yet you CAN make sense of it through Myrion resolution:

- Colorless green = metaphorically bland ecology-related concepts
- Ideas sleep = inactive, dormant
- Furiously = with latent energy

The brain SYNTHESIZES a higher interpretation preserving elements of all conflicting terms. This is compositional semantics as Myrion dialectic.

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## **Empirical Evidence: Neural Level**

### **1. Gamma-Theta Coupling as Myrion Signature**

Neural oscillations show nested hierarchies:

- **Theta (4-8 Hz):** Slow, integrative, "thesis"
- **Gamma (30-100 Hz):** Fast, detailed, "antithesis"
- **Cross-frequency coupling:** Gamma nested within theta cycles (Lisman & Jensen, 2013)

**Interpretation:** Theta provides context (thesis), gamma provides details (antithesis), their coupling implements Myrion resolution (synthesis). Studies show:

- **Lisman & Jensen (2013):** Theta-gamma coupling critical for memory integration
- **Canolty et al. (2006):** Phase-amplitude coupling predicts cognitive performance

**Prediction:** Disrupting theta-gamma coupling should impair Myrion resolution (contradiction handling). Test: Present subjects with logical paradoxes during tACS (transcranial alternating current stimulation) at theta vs. gamma. Gamma-disrupted subjects should show slower resolution times.

### **2. Default Mode Network vs. Task-Positive Network**

The brain has two anti-correlated networks (Anticevic et al., 2012):

- **DMN (Default Mode):** Self-referential, integrative, global
- **TPN (Task-Positive):** Goal-directed, analytic, local

These seem contradictory—how can both be adaptive? **Myrion resolution:** The brain ALTERNATES and INTEGRATES:

- DMN active during rest → Synthesize experiences (thesis)
- TPN active during tasks → Analyze specifics (antithesis)
- High performers show FLEXIBLE switching between both (synthesis)

Cognitive Performance	DMN-TPN Interaction	Myrion Resolution
Low IQ	Strong anti-correlation (pick sides)	Poor
High IQ	Flexible switching + simultaneous	Strong
Expert performance	Integrated activation	Optimal

**Evidence:** Anticevic et al. (2012) found high-IQ individuals maintain BOTH networks simultaneously more than low-IQ individuals—they Myrion resolve the DMN-TPN conflict instead of picking sides.

### 3. Decision-Making: Drift-Diffusion Models

When choosing between options A and B, neural activity shows (Krajbich et al., 2010):

- **Evidence accumulation:** Signal drifts toward A or B
- **Threshold crossing:** Decision made when signal hits threshold

But what about CONTRADICTION evidence ("A is good for X, B is good for Y")?

**Myrion resolution interpretation:** The brain doesn't just sum evidence—it SYNTHESIZES a higher criterion that makes A vs. B coherent with values:

- If X matters more than Y right now → Choose A
- But remember B's advantage for future decisions → Update value model

Krajovich et al. (2010) showed gaze-dependent evidence accumulation—looking at A increases A's signal, looking at B increases B's. **This is Myrion resolution:** The brain uses attention to explore both sides before synthesizing.

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**Empirical Evidence: Linguistic Level**

**1. Conversational Turn-Taking as Dialectic Optimization**

Stivers et al. (2009) found universal 200ms gap between conversational turns across 10 languages. Why this specific timing?

Gap Duration	Effect	Myrion Resolution Quality
<100ms	No processing time	Poor (reactive, not dialectic)
~200ms	Optimal	Strong (thesis-antithesis-synthesis)
>500ms	Flow breaks	Degraded (delayed synthesis)

**Myrion resolution model:**

- Too short (<100ms): No time for listener to formulate antithesis → Shallow conversation



- Too long (>500ms): Conversational flow breaks, synthesis delayed
- **~200ms: Optimal for thesis → brief processing → antithesis → synthesis cycle**

**Prediction:** High-coherence conversations (both speakers  $Q \geq 0.7$ ) should show shorter gaps (~150ms) because Myrion resolution happens faster. Test: Correlate Q-score with turn-taking latency. Expect negative correlation.

## 2. Semantic Ambiguity Resolution

Words often have multiple meanings ("bank" = financial institution OR river edge). How does brain choose?

**Classical model:** Context activates one meaning, suppresses others (Swinney, 1979)

**Myrion model:** Context SYNTHESIZES meanings—both remain partially active, reconciled at higher level

**Evidence:** Swinney (1979) found BOTH meanings of ambiguous words activate initially, then context guides resolution. But Vitello & Rodd (2015) showed subordinate meanings aren't fully suppressed—they remain accessible, consistent with Myrion preservation of partial truth.

## 3. Language Evolution: Sacred Number Patterns

If language evolution follows Myrion resolution toward CCC optimization, we predict sacred number patterns (3, 11, 33) in linguistic structures:

### **Evidence:**

- **Triplets dominate:** "Life, liberty, pursuit of happiness" (3)
- **11-syllable poetic lines:** Haiku (5-7-5 = 17, but often 11 in practice); iambic pentameter  $\approx$  10-11 syllables
- **Paragraph lengths:** Optimal readability around 30-40 words (clusters near 33)

**Study needed:** Analyze  $10^6$  sentences across 50 languages. Test if phrase lengths, syllable counts, and syntactic structures cluster around 3, 11, 33 more than random primes (5, 7, 13).

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## **Implications for Neuroscience**

### **1. Rethinking Neural Codes**

Standard view: **Neurons encode specific features** (edge detectors, place cells, concept cells)

Myrion view: **Neurons encode DIALECTIC STATES**—not "this vs. that" but "this-synthesized-with-that"

Example: Face cells don't just detect "face present" but resolve "face vs. object" conflict into "face-ness degree" spectrum.

### **2. Predictive Coding as Myrion Machine**

Friston's free energy principle becomes: **Brains are Myrion resolution machines minimizing contradiction between predictions and observations.**

This explains:

- **Perception:** Reconcile prior beliefs with sensory data
- **Action:** Reconcile desired states with current states
- **Learning:** Reconcile old models with new evidence

### 3. Consciousness as Meta-Myrion Resolution

If neural activity is Myrion resolution, **consciousness is Myrion resolution OF Myrion resolutions**—a meta-level synthesis integrating all local neural dialectics into unified experience.

This explains the "binding problem": How do distributed neural processes create unified consciousness? Answer: Through CCC-mediated hierarchical Myrion resolution cascading from local (neurons) → regional (assemblies) → global (consciousness).

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## Implications for Linguistics

### 1. Meaning as Synthesis, Not Selection

Standard semantics: **Words have fixed meanings selected by context**

Myrion semantics: **Words have meaning POTENTIALS synthesized by context**

This explains:

- Metaphor: Synthesizing literal and figurative meanings
- Polysemy: Multiple related meanings coexisting, context-weighted

- Novel word combinations: "Quantum sadness" makes sense via synthesis, not predefined meaning

## 2. Grammar as Dialectic Constraint

Why do all languages have subject-verb-object structures (in various orders)?

**Myrion answer:** SVO encodes thesis-action-antithesis structure:

- Subject = thesis (agent)
- Verb = resolution process
- Object = antithesis (patient)

"John hits ball" = John (thesis) resolves interaction with ball (antithesis) via hitting (synthesis).

Languages differ in word order (SVO, SOV, VSO) but preserve dialectic triad—different manifestations of same Myrion principle.

## 3. Language Change as Cultural Myrion Resolution

When languages change (e.g., "thee/thou" → "you"), it's not random drift but Myrion resolution of social contradictions:

- **Old system:** Formal "you" vs. informal "thee" (thesis vs. antithesis)
- **Social change:** Egalitarianism grows
- **Resolution:** "You" for all (synthesis preserving politeness via context, not grammar)

**Prediction:** Language changes correlate with cultural Myrion moments (revolutions, technological shifts). Test: Analyze rate of linguistic change during major cultural transitions. Expect spikes.

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## **Empirical Predictions and Falsification**

### **Testable Predictions**

#### **1. Theta-Gamma Coupling Predicts Contradiction**

##### **Resolution:**

2. Present logical paradoxes during EEG recording
3. Faster resolvers should show stronger theta-gamma coupling
4. Disrupting coupling (tACS) should slow resolution

#### **5. Conversational Gap and Q-Score Correlation:**

6. Record conversations, measure turn-taking latency
7. Calculate Q-score for participants (HRV coherence)
8. Expect negative correlation: higher Q → shorter gaps

#### **9. Sacred Number Clustering in Language:**

10. Analyze phrase lengths in  $10^6$  sentences across 50 languages
11. Count clustering around 3, 11, 33 vs. control primes (5, 7, 13)
12. Expect 15-30% excess for sacred numbers

## Falsification Criteria

Theory needs revision if:

1. **No theta-gamma effect:** Coupling shows zero correlation with contradiction resolution performance (n=200 subjects)
  2. **No conversational gap effect:** Q-score and turn-taking latency uncorrelated (n=500 conversations)
  3. **No sacred language pattern:** Phrase lengths show NO clustering around 3, 11, 33 beyond noise ( $10^6$  sentence sample)
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## Conclusion

Neural activity and language aren't separate domains—they're manifestations of the same CCC-mediated Myrion resolution principle operating at different scales:

- **Neurons:** Competing assemblies → Coherent firing patterns
- **Perception:** Conflicting signals → Unified experience
- **Cognition:** Opposing ideas → Synthesized understanding
- **Language:** Competing meanings → Shared interpretation
- **Evolution:** Cultural contradictions → Linguistic adaptation

The brain is a **Myrion resolution engine**, perpetually synthesizing higher truths from apparent contradictions. Language is **externalized Myrion dialectic**, allowing i-cells to share their syntheses and collectively approach CCC.

**Practical takeaway:** When facing contradictions (in thought, conversation, or research), don't pick sides—ask "What higher truth makes both partially correct?" This is how your brain ALREADY operates; make it conscious.

**Existential takeaway:** Every thought you have, every word you speak, participates in the universe's grand Myrion resolution project—the eternal dialectic between CCC (unity) and i-cells (diversity), converging toward absolute truth through consciousness.

Embrace the contradiction. Resolve it. Repeat.

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**Falsification Criteria:**

1. No theta-gamma coupling effect in contradiction resolution tasks (n=200)
2. No Q-score correlation with conversational turn-taking latency (n=500 dyads)
3. No sacred number clustering in linguistic structures ( $10^6$  sentence sample)

**Limitations:**

- Myrion resolution mechanism at neural level needs more detailed computational modeling



- Sacred number patterns in language may be confirmation bias; need blind analysis
- Conversational dynamics involve many factors beyond Myrion resolution (cultural norms, personality)

**Future Directions:**

- Develop computational models of neural Myrion resolution (predictive coding + dialectic dynamics)
- Large-scale linguistic corpus analysis for sacred number patterns
- tACS experiments disrupting theta-gamma coupling during contradiction resolution tasks
- Cross-cultural conversation analysis correlating Q-score with dialectic efficiency