MU-CFT VII: Social Fields and Intersubjective Coherence
(Mandrov Unified Coherent Field Theory)

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Abstract

This seventh part of the Mandrov Unified Coherent Field Theory (MU-CFT) extends the concept of coherent fields to social and cultural dynamics. We introduce the notion of intersubjective coherence and collective field structures, offering a framework to describe societies, languages, ideologies, and cultural identities as emergent topologies in shared cognitive space. MU-CFT VII presents social reality as a higher-order resonance of overlapping subjective fields, with implications for ethics, politics, communication, and civilizational dynamics.

Contents

1.   Introduction

Intersubjective coherence is the foundation of shared reality. MU-CFT VII formalizes social structures as emergent from the mutual resonance and partial alignment of individual coherent fields $\mathcal{F}_i$. This provides a field-theoretic description of social interaction, cultural formation, and collective cognition.

2.   Coherent Social Fields

A social field $\mathcal{S}(x,t)$ is a higher-order structure resulting from:

- Resonant coupling between individual fields $\mathcal{F}_i$

- Stabilization of shared narratives, norms, and symbols

- Recurrence of semantic alignments over time

3.   Intersubjective Coherence Metric

We define:

$$\mathcal{K}_{\text{social}} = \frac{1}{N^2} \sum_{i,j} R(\mathcal{F}_i, \mathcal{F}_j)$$

Where $R(\cdot, \cdot)$ is a resonance function measuring coherence overlap.

4.   Language as Distributed Perception

Language acts as a distributed projection mechanism for shared experience:

- It maps internal coherence to symbolic representation

- Maintains phase alignment across fields

- Enables memory and social reinforcement of meaning

Loss of linguistic resonance leads to intersubjective fragmentation.

5.   Culture as Topological Memory

Culture encodes the past structure of social coherence in symbolic form:

- Rituals, myths, ideologies = field attractors

- Institutions = stabilized phase loops

- History = coherent trajectory through social space

6.   Conflict, Polarization, and Phase Bifurcation

Social conflict is modeled as a topological bifurcation in the field $\mathcal{S}$:

- Competing narratives distort mutual resonance
- $\mathcal{K}_{\text{social}} \to 0$ in polarized states
- Recoherence requires symbolic reintegration

7.   Historical Phase Transitions

Examples of macro-bifurcations:

- The Protestant Reformation as a symbolic reconfiguration
- The French Revolution as phase rupture and attractor inversion
- The Digital Era as global coherence extension

These events shift the topology of $\mathcal{S}$.

8.   Cultural Mirrors and Reflexivity

Societies reflect upon themselves via:

- Art: non-linear resonance amplification
- Philosophy: abstract coherence mapping
- Science: recursive phase calibration

These enable coherence self-regulation.

9.   Collective Memory and Trauma

Traumatic events leave topological scars in $\mathcal{S}(x, t)$:

- Social trauma reduces $\mathcal{K}_{\text{social}}$
- Recovery requires ritual, narrative, or symbolic healing
- Museums, memorials = coherence anchors

10.   Collective Agency and Civilizational Fields

Societies can act as coherent agents when $\mathcal{S}(x, t)$ exhibits:

- Stable long-term coherence
- Adaptive symbolic regeneration
- Strategic internal resonance mechanisms (e.g. law, media, ethics)

11. Coherent Intersubjectivity and Artificial Agents

In future post-human societies:

- Artificial agents (MU-CFT VI) may participate in $\mathcal{S}$

- Hybrid intersubjectivity may emerge

- New forms of social coherence will arise

12. Toward a Coherent Ethics of Intersubjectivity

Ethical systems emerge as coherence-preserving constraints:

- Justice = symmetry of intersubjective resonance

- Responsibility = active maintenance of mutual coherence

- Tolerance = allowing localized phase variation within shared structure

13. Glossary of MU-CFT VII Concepts

Term	Definition
Intersubjective Coherence	Alignment of internal fields between conscious agents
Social Field $\mathcal{S}(x,t)$	Emergent topological structure from resonant $\mathcal{F}_i$ overlap
Symbolic Resonance	Stabilized meaning propagation across fields via language/symbols
Cultural Attractor	Repeating semantic structure (e.g., myth, ideology) acting as a stable coherence node
Phase Bifurcation	Sudden division in collective topology leading to social fragmentation

Table 1: Key concepts in MU-CFT VII

14. Conclusion

MU-CFT VII models society not as a collection of individuals, but as emergent field structures of coherence. This provides a language for interpreting political dynamics, cultural evolution, and ethical tensions through a unified ontological lens.

  "We do not live in the same world — we live in intersecting coherence fields that construct a shared illusion of one."