

# An Underlying Principle Across Disciplines and a Method of Better Living

*Nodes, Fields, and Dynamic Interplay*

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## ABSTRACT

This paper proposes that a common structural principle underlies multiple disciplines: a shift within a field produces differentiation, which generates tension, and through interaction, new forms emerge. This process is described as dialectical oscillation, a dynamic interplay between opposing or differentiating elements that, when sustained, gives rise to dynamic harmony. The principle is examined across mathematics, physics, chemistry, biochemistry, biology, history, psychology, and art, where it appears in distinct but structurally comparable forms. The paper further suggests that this pattern is not only descriptive but prescriptive, offering a framework for navigating human life through the constructive engagement of tension. Rather than seeking static equilibrium, the proposed model emphasizes relational balance, emergence, and ongoing adjustment as conditions for stability and growth.

**KEYWORDS:** dialectical oscillation; dynamic tension; dynamic harmony; emergence; relational systems; interdisciplinary theory; aesthetics; psychology; systems thinking; art practice

## 1. INTRODUCTION: SHIFT, TENSION, EMERGENCE

Across multiple domains, a recurring structural pattern can be observed: a relatively stable field undergoes a shift, generating differentiation; differentiation produces tension; and through interaction, new forms emerge.

This process may be described as dialectical oscillation—a dynamic interplay between opposing or differentiating elements. When this interplay is sustained without collapse, it produces dynamic harmony: a condition of temporary stability within ongoing change.

This paper argues that the sequence  
shift → tension → interaction → emergence  
is an underlying principle across disciplines. Further, it suggests that this principle is not only descriptive but also prescriptive, offering a framework for navigating human life.

## 2. THE PRINCIPLE ACROSS DISCIPLINES

### a. Mathematics: Differentiation and Relation

Mathematics begins with unity, yet becomes meaningful only through differentiation. The transition from one to two establishes relation—comparison, operation, and transformation.

An equation embodies structured tension: two sides held in equilibrium, where change in one necessitates adjustment in the other. Mathematics may therefore be understood as a system of relations maintained through balance and transformation.<sup>1</sup>

**b. Physics: Fields and Dynamic Equilibrium**

Physics describes reality in terms of fields and interactions. A disturbance within a field produces force, motion, and structure.

The atom exemplifies this: a nucleus and an electron cloud exist in dynamic equilibrium, maintained by opposing tendencies such as attraction and motion. Stability here is not fixed, but continuously negotiated.

Across scales, physical structures emerge from interacting forces within fields.<sup>2</sup>

**c. Chemistry: Bonding as Managed Tension**

Chemical bonding reflects the interplay of forces between atoms. Bonds represent energetic relationships—attraction, repulsion, and exchange.

Molecular stability arises when these forces reach a temporary balance, yet this balance remains conditional. Chemistry demonstrates that structure emerges from managed tension rather than its elimination.<sup>3</sup>

**d. Biochemistry: Emergence Through Interaction**

Biochemical systems exhibit increasing complexity. Molecules organize into networks—proteins, membranes, metabolic pathways—defined by interaction rather than isolation.

A living cell is a system of feedback, regulation, and exchange. Its coherence depends on the continuous interplay of its components. Emergence here is relational and systemic.<sup>4</sup>

**e. Biology: Regulation and Dynamic Harmony**

Biological life is sustained through regulation. Homeostasis is not static equilibrium but continuous adjustment.

Organisms exist between opposing demands—stability and adaptation, order and entropy. Health may therefore be understood as dynamic harmony: coherence maintained within fluctuation.<sup>5</sup>

**f. History: Tension and Transformation**

Historical systems emerge, stabilize, and transform under the pressure of internal and external tensions.

Economic disparity, ideological conflict, and technological change generate instability. From this instability, new configurations arise. History may thus be understood as a process of transformation driven by tension.<sup>6</sup>

**g. Psychology: Integration and Growth**

Psychological development involves the integration of opposing elements within the self.

Tensions between desire and restraint, individuality and belonging, are conditions of growth. Development occurs when these tensions are held and integrated, allowing a more coherent self to emerge.<sup>7</sup>

**h. Art: Aesthetic Expression of Dynamic Tension**

In art, this principle becomes perceptible.

A compelling work balances structure and spontaneity, control and freedom, order and disruption. Aesthetic coherence emerges when these elements are held in dynamic tension.

**Figure 1.** Daniel Shorkend. *Dialectical Oscillation II* (170 × 170 cm, mixed media, 2025). Structured divisions intersect with fluid energetic movement, establishing a field of tension between order and dispersion.



**Figure 2.** Daniel Shorkend. *Dialectical Oscillation IX* (170 × 170 cm, mixed media, 2026). Gestural energy intensifies and partially destabilizes structural divisions, heightening the oscillation between control and release.



### 3. TOWARD A METHOD OF BETTER LIVING

If this principle is fundamental, it may guide practice.

Action must be calibrated: one initiates, allows processes to unfold, and intervenes appropriately. Imbalance disrupts emergence.

Relationships should aim at mutual benefit. Stability arises through balanced exchange rather than one-sided dynamics.

Tension should be understood as generative. Rather than seeking its elimination, one engages it constructively, allowing new forms of meaning to emerge. In judo and sport, this principle is embodied: tension is not removed but engaged. Through balance, timing, and relation, opposing forces are redirected, and technique emerges. Harmony is thus not the absence of tension, but its integration.

A well-lived life is therefore an ongoing process of dynamic adjustment between opposing demands.

#### **4. CONCLUSION: NODES, FIELDS, AND GROWTH**

Across disciplines, a shared structure becomes visible: fields as conditions, nodes as points of differentiation, and interactions as generative processes.

A shift introduces tension; tension produces interaction; interaction gives rise to emergence.

A healthy system—whether physical, biological, social, or personal—is one in which these elements remain in dynamic balance, enabling both stability and transformation.

To recognize this principle is to understand reality as relational and processual. To apply it is to orient oneself toward a life that uses tension to generate coherence, growth, and meaning.

#### **Notes**

1. General treatments of relational structure in mathematics.
2. Richard Feynman, *The Feynman Lectures on Physics* (Reading, MA: Addison-Wesley, 1964).
3. Peter Atkins and Julio de Paula, *Physical Chemistry* (Oxford: Oxford University Press, 2010).
4. Bruce Alberts et al., *Molecular Biology of the Cell* (New York: Garland Science, 2014).
5. Ernst Mayr, *What Is Biology?* (New York: Basic Books, 2001).
6. Arnold Toynbee, *A Study of History* (Oxford: Oxford University Press, 1934–1961).
7. Carl Gustav Jung, *The Structure and Dynamics of the Psyche* (Princeton: Princeton University Press, 1960).