

Youjue Physiology: An Outline

**The Generative Theory of the Sensation-
Behavior Cycle**

By Wu Jingyu

To my father, Wu Zhongguan,
who embodied all three—
father, teacher, and truest friend—
and taught me that the deepest understanding is felt, not
just known.

Content Synopsis

This Outline, as an interdisciplinary work integrating physiological psychology and philosophy, pioneeringly proposes **Youjue Physiology** as an entirely new paradigm. It confronts the fundamental dilemma of contemporary mind research, advocating a return from abstract speculation about "consciousness" to **life itself** — that is, the living, self-constructing "**Youjue System**."

The book is titled *An Outline*, aiming for a fundamental shift in research strategy: its primary mission is not to list new experimental data, but to provide a powerful meta-framework for the creative reintegration of existing, complex mental phenomena and scientific discoveries. It seeks to sketch a unified "generative landscape of the living Youjue universe" for the life sciences, which have fallen into the trap of "data-rich but theoretically fragmented."

The entire Outline is founded on a concise yet profound core: mental phenomena are rooted in the fundamental life process of the "**Sensation-Behavior Cycle**." Based on this, it constructs the framework of "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation**," with the vertical axis representing evolutionary strata (Vital Stratum, Social Stratum, Noetic Stratum) and the

horizontal axis representing three basic tensions (Defensive, Offensive, Friendly), systematically parsing the complete mental spectrum from pain and hunger to belonging and intellectual curiosity. This Outline explicitly proposes for the first time: the engine driving this spectrum is **"Expectancy Sensation"** running through all life — from the innate tension baseline shaped by evolution to the concrete situational expectations formed in individual experience. All levels of "unwellness" and growth originate from the conflict between expectation and reality (**"Expectancy-Sensation Mismatch"**), which in turn drives learning and adaptation.

More importantly, this Outline reveals a unified generative logic running through all strata: from the synchronization of neuronal clusters, the cohesion of social circles to the propagation of thought paradigms, their formation and consolidation all follow the same isomorphic life-organizing principle of **"achieving integration through resonance of sensation-behavior patterns, followed by selective consolidation via positive value evaluation."** We will trace this logic from the primitive coordination of single-celled organisms, following how it constructs the grand social epic from bloodline bonding to civilizational community.

The five chapters of the Outline constitute a generative epic from micro to macro:

- **"Cornerstone"** establishes the closed-loop nature of innate reflexes, revealing that their deep motivation lies in maintaining **Innate Expectancy Sensation**;
- **"Growth"** reveals how experience drives the refinement of **Learned Expectancy Sensation** and behavioral selection through **Expectancy-Sensation Mismatch**;
- **"Sublimation"** demonstrates how sociality (from microbial cooperation to human culture) and cognition **emerge** naturally from life interactions;
- **"Interpretation"** reconstructs **Need, Emotion, Consciousness, and Self** in pure "Youjue" language, unifying them in the dynamic dialogue between expectation and reality;
- **"Resonance"** proceeds from "I feel...", guiding readers on how to self-direct and become a lucid, agentic, and warm **"Youjue Person."**

To deepen theoretical foundations and expand intellectual context, this book includes two appendices:

- **Appendix I: Theoretical Origins and Conceptual System**

systematically traces the profound resonance between the "Three-Dimensional Taxonomy" and Yuri Vyazemsky's model of **The Ennead of Needs**, and provides clear definitions of core terminology throughout the book, offering readers a solid conceptual map and intellectual frame of reference.

- **Appendix II: Intellectual Lineage and Theoretical Exploration** further elucidates the paradigm-revolutionary significance of this Outline, its integration and transcendence of traditional theories, and extended reflections from the perspectives of life science, cognitive science, and civilization, demonstrating the powerful explanatory tension and humanistic care of the "Youjue" framework.

Youjue Physiology: An Outline is not only a theoretical revolution, but also a transformation of worldview. It enables science to truly begin **embracing the complete life**, and provides a solid framework for understanding and practice, from the **"Youjue Person"** to the **"Youjue Ecology"** of civilizational futures, while also opening new perspectives for understanding mind, self, and social cognition.

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Introduction: A Paradigm Revolution

In the long journey to explore the mysteries of the mind, we seem to be a group of craftsmen depicting shadows. We meticulously measure the shape of shadows and record their changes, yet we place too much emphasis on the shadows themselves. This grand shadow we call "consciousness," with its ambiguity and philosophical burden, has long hindered the progress of science. It is time to turn around and face the entity that casts the shadow —— that is life itself, a living **Youjue System**.

This Outline aims to proclaim and construct an entirely new scientific paradigm: **Youjue Physiology**. It does not seek to completely negate the past, but rather to provide a solid theoretical core for the life sciences that have fallen into the predicament of "fragmentation, idling, and disorientation," enabling a return to its authentic object.

1. Predicament and Breakthrough: From the "Consciousness" Maze to the Solid Starting Point of "Systemic Sensation"

Contemporary mind science has reached an impasse in the labyrinth of "consciousness." The ontological question "What is

consciousness?" has drawn research into a vortex of philosophical speculation. We advocate a fundamental shift in research strategy: no longer obsessing over depicting the grand shadow called "consciousness," but turning around to directly examine the entity that casts the shadow itself. This starting point was indicated for us by the great physiologist Ivan Sechenov — namely, **"Systemic Sensation."**

It does not refer to the five senses directed at the external world, but to the overall representation of an organism's internal state, that vague background of "bodily comfort or discomfort." Sechenov pointed out that sensations such as hunger, thirst, and fatigue are signals that drive behavior and provide the fundamental basis for maintaining life's existence, a power that can even override consciousness itself. This provides us with an irrefutable point of departure: mental activity is deeply rooted in the physiological processes that sustain life.

It must be clearly stated that this Outline does not aim to report a series of new experimental findings, but rather attempts to initiate a fundamental transformation in research strategy. We face a paradox: data concerning life and mind are unprecedentedly abundant,

yet the overall theoretical picture becomes increasingly fragmented and bewildering. This Outline contends that the current primary task is not to accumulate more data, but to require a more solid theoretical core capable of integrating this data.

Therefore, what this Outline practices is, first and foremost, a revolution in research strategy. The book is titled *An Outline*, and its core mission lies precisely here: to provide a meta-framework called "**Youjue Physiology**," with the "**Sensation-Behavior Cycle**" as the basic unit, to creatively reintegrate the already extremely rich phenomena, data, and intellectual heritage. We aim to review and reinterpret many great discoveries from Sechenov to Edelman, examining them within this framework, thereby allowing scattered knowledge to present a unified picture under new illumination.

This is precisely a grand practice at the level of theoretical construction of the "**The Remembered Present**" revealed by G.M. Edelman — integrating the "**Sensation-Behavior Traces**" from intellectual history into the creation of the present moment, generating a fresh, more explanatory "now." We invite readers to temporarily suspend their habitual craving for fragmented empirical

evidence, focusing first on understanding this framework itself, and applying it to re-explore any life phenomena and scientific discoveries with which you are familiar.

2. Intellectual Lineage: Whytte, Sechenov, and the Harbinger of "Youjue"

"Youjue Physiology" is rooted in a clear and profound intellectual lineage.

- Robert Whytte's 18th-century proposal of the "**Youjue Principle**" precisely cuts to the distinction between life and non-life: namely, that intrinsic, active capacity for sensation and response. It is the source of all behavior, emotion, and meaning in life.
- Ivan Sechenov's "**Systemic Sensation**" provides specific physiological content for the "**Youjue Principle**," revealing its signal function as a "life regulator."

Standing on the shoulders of these giants, we achieve a crucial conceptual leap: **Systemic Sensation** must include the "re-sensation" produced after the higher centers of the nervous system integrate and interpret all internal and external signals. This constitutes a fundamental "**Sensation-Behavior Cycle**" — sensation drives

activity (including overt bodily behavior and covert neural processing), and the results of these activities (whether changing the external environment or forming new internal neural connections) directly generate **Systemic Sensation** again through the "**Reentry**" mechanism, cycling thus.

3. Core Framework: Three-Dimensional Dynamic Taxonomy of Youjue Sensation

To transform this grand theory into a researchable scientific system, we propose a three-dimensional, dynamic framework of "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation.**" It stands on a unitary dynamic cornerstone and, from an evolutionary perspective, outlines a three-tiered panorama of the living Youjue universe.

- **Dynamic Cornerstone: Proto-Sensation — Three Basic Tensions of Homeostasis**

This is the "fundamental force" of Youjue life, the innate cornerstone of all "**Sensation-Behavior Cycles,**" running through and driving all subsequent evolutionary strata.

- **Defensive** tension (boundary integrity): such as pain and nausea, driving outward threat-excluding behavior.

- **Offensive** tension (energy balance): such as hunger and thirst, driving inward resource-acquiring behavior.
- **Friendly** tension (rhythmic continuation): such as sleepiness and sexual desire, driving temporal fusion and reproductive behavior.

On this cornerstone, the **Youjue System**, through the iteration and complexification of the "**Sensation-Behavior Cycle**," gradually emerges three relatively independent yet mutually permeable evolutionary strata:

- **Vital Stratum:** Dynamics of Survival and Reproduction

- Safety/Territory Defense (Defensive)
- Nutrition/Resource Acquisition (Offensive)
- Sex/Reproduction (Friendly)

- **Social Stratum:** Architecture of Group Bonding

- Group Belonging (Defensive)
- Hierarchical Status (Offensive)
- Altruistic Attachment (Friendly)

- **Noetic Stratum:** Dimensions of Meaning-Seeking

- Exploration (Defensive)
- Play (Offensive)

➤ Religious Cognition (Friendly)

These three strata and nine categories are by no means fragmented static units, but rather a spiraling ascending generative process. The trajectory of life is reversible: the "**Youjue**" **System** simultaneously contains the potential of all categories, with the distinction lying only in the real-time fluctuation of "Youjue concentration" of different qualities within the life flow.

For example, the classic path from the **Friendly** dynamics of "sex/reproduction" to the sense of safety in "group belonging," and then to supporting "exploratory" behavior — this is precisely the spiral ascent pulled by value evaluation. And more revolutionary is that the **Youjue** being does not run between floors, but experiences continuous turbulence in the system's "Youjue dynamic ratio": it can, while dominating "**Noetic-Exploration**," let "**Social-Altruistic**" modulate behavior as a background concentration; or, at the moment of frustration, pull dominance back to "**Vital-Rhythmic**," letting soothing feelings overwhelm anxiety. This is not switching, but like a palette, where concentrations of Youjue are simultaneously present, dynamically gaming, and emergently dominant.

This three-dimensional model, compatible with both structural generativity and dynamic real-time flux, is not only the intrinsic dynamic orientation of Youjue sensation, but also the core generative logic for understanding the complete spectrum of life from innate expectancy to learned expectancy, from physiological mismatch to cognitive mismatch.

4. Core Innovation: Unified Generative Logic of the "Sensation-Behavior Cycle"

What this Outline brings is not merely a new underlying generative logic. As the generative epic from micro to macro unfolds, a more profound insight will emerge: the emergence and consolidation of complex structures in living systems across the three seemingly disparate strata of "neural," "social," and "cognitive" all follow the same underlying logic.

We will see that the selective survival of a neuronal functional cluster, the cohesive identity of a sociocultural circle, and the propagation and development of a scientific or artistic school can all be uniformly understood as: the system, based on its intrinsic **Expectancy Sensation** (whether an innate tension baseline or a learned experiential model), achieves "resonance" internally or between

systems through specific forms of "**Reentry**"; when **Immediate Sensation** conflicts with this expectation in an identifiable way (**Expectancy-Sensation Mismatch**), the system initiates evaluation; if this conflict pattern can be resolved through evaluation and brings about enhanced systemic efficacy (positive value evaluation), it will drive systemic resources to select and consolidate it, thereby forming a tighter functional unity.

Revealing this unified logic of "**Resonance-Evaluation-Consolidation**" is the ultimate ambition of this Outline in terms of theoretical integration. It enables us to seamlessly interpret the grand continuum from intracerebral chemical fluctuations to the structures of human civilization using the same language of life principles.

5. The Path of This Outline: Tracing the Generative Epic of the "Sensation-Behavior Cycle"

Based on this framework, this Outline will unfold a generative epic from micro to macro, from innate to learned. We will:

- Start from **Proto-Sensation** and **Innate Reflexive Loop**, laying the initial sensation-driven dynamics of life.
- Track how experience, through mechanisms like **Reentry** and

Neural Darwinism, sculpts and differentiates finer sensations and participates in selecting more complex behaviors.

- Reveal how the "Youjue" of the **Social Stratum** and **Noetic Stratum** emerge from the interaction of the **Vital Stratum** — we will begin with the synergistic resonance of single-celled organisms, pass through the primordial foundation of bloodline bonding, and arrive at the secondary foundation shaped by culture, completely showcasing the evolutionary epic of social "**Sensation-Behavior**" closed loops, ultimately constructing the rich mental world we experience.
- Finally, we will use pure "Youjue" language to thoroughly reconstruct traditional concepts such as "**Need**," "**Emotion**," "**Consciousness**," and "**Self**."

The end point of this journey is to refocus the light of science on that warm, radiant, and constantly self-constructing entity — living life itself.

Youjue Physiology is born for this very purpose. This Outline is not only a theoretical revolution, but also a return to life.

Chapter 1: Reflexive Closed Loops and Systemic Sensation

1.1 Proto-Sensation: The Primordial Tone of Life's Tensions

The grand edifice of mind does not stand upon a void, but is rooted in the most primordial and stubborn sensory reality of the living organism. Before we turn our gaze to the waves of emotion or the first shadows of consciousness, we must first return to the source of all experience — those deep forces that drive and sustain life's existence. This section will explore the origins of these forces, which we term "**Proto-Sensation**" — the basic tensions of life, and explicate how they constitute the "first impulse" for the birth of the mental universe through innate closed loops.

1.1.1 Three Basic Tensions of Living Systems: The Source of Youjue Action

Inspired by Sechenov's "Systemic Sensation" and the work of Pavel Simonov and Yuri Vyazemsky on need taxonomies, we identify three dimensions of basic tension (Defensive, Offensive, Friendly) that living organisms use to maintain **Homeostasis** —

they serve as the primordial tonal background of life sensation. They are not specific sensation points, but diffuse background tensions, the initial mode of interaction between life and the world, constituting the original tone of **Youjue**.

1. Defensive Tension — "The Sense of Boundary Integrity"

- Core Experience: An alarm against violation, damage, and disintegration.
- Functional Purpose: To guard the physical and psychological boundaries of the living system, excluding threats.
- Behavioral Orientation: **Extroversive** — expelling harmful objects or states from within the system's boundaries.

2. Offensive Tension — "The Sense of Energy Balance"

- Core Experience: A craving for deficiency, deficit, and consumption.
- Functional Purpose: To acquire and assimilate resources from the environment, maintaining the system's energy and material balance.
- Behavioral Orientation: **Introversive** — actively demanding and absorbing from the environment to replenish itself.

3. Friendly Tension — "The Sense of Rhythmic Continuation"

- Core Experience: An orientation toward cycles, fusion, and renewal.
- Functional Purpose: To ensure the system synchronizes with its own rhythms and environmental cycles, achieving life's continuation and regeneration.
- Behavioral Orientation: **Chronoversive** — integrating into larger rhythms through periodic behavior, ensuring long-term survival.

These three tensions together constitute a stable "Sensation-as-Driven Triangle," within whose dynamic force field can be found the initial vectors for all internal states and external behaviors of the living organism.

1.1.2 Classification of Proto-Sensation and Inborn Closed Loops

Based on the three tensions above, we can systematically classify major Proto-Sensations and reveal their innate, goal-directed behavioral closed loops.

- **Dynamic Vector: Defensive**

◆ **Proto-Sensation: Pain**

- **Core Experience:** Intense, localized "damage" signal
- **Physiological Origin:** Tissue damage
- **Innate Reflexive Loop:** Withdrawal/Protection: hand withdrawal, guarding the injured area

◆ **Proto-Sensation: Nausea**

- **Core Experience:** Surging, expulsive discomfort
- **Physiological Origin:** Toxin ingestion, visceral dysfunction
- **Innate Reflexive Loop:** Expulsion: vomiting, refusal to ingest

◆ **Proto-Sensation: Choking Sensation**

- **Core Experience:** Extreme "oxygen deprivation" panic
- **Physiological Origin:** Blood oxygen deficiency, airway obstruction
- **Innate Reflexive Loop:** Clearance and Deep Inhalation: struggling, coughing, gasping

● **Dynamic Vector: Offensive**

◆ **Proto-Sensation: Hunger**

- **Core Experience:** Gastric "emptiness" and craving for

food

- **Physiological Origin:** Decreased blood glucose, gastric emptying
- **Innate Reflexive Loop:** Foraging/Feeding: actively searching for and ingesting food

◆ **Proto-Sensation: Thirst**

- **Core Experience:** Throat "dryness" and urgent need for liquid
- **Physiological Origin:** Elevated extracellular fluid osmotic pressure
- **Innate Reflexive Loop:** Water-seeking/Drinking: actively finding and drinking liquid

◆ **Proto-Sensation: Fatigue**

- **Core Experience:** Systemic "energy depletion" and decreased efficacy
- **Physiological Origin:** ATP exhaustion, metabolic waste accumulation
- **Innate Reflexive Loop:** Rest/Sleep: cessation of activity, seeking rest

● **Dynamic Vector: Friendly**

◆ **Proto-Sensation: Sleepiness**

- **Core Experience:** Sensory "fogginess" and "drooping" of consciousness
- **Physiological Origin:** Circadian rhythms, sleep pressure
- **Innate Reflexive Loop:** Falling Asleep: finding safe location, entering sleep

◆ **Proto-Sensation: Sexual Desire**

- **Core Experience:** Reproductive system "activation" and "attraction"
- **Physiological Origin:** Cyclical changes in sex hormone levels
- **Innate Reflexive Loop:** Courtship/Mating: signaling, performing mating behavior

◆ **Proto-Sensation: Excretory Sensation**

- **Core Experience:** Bladder/rectal "fullness" and "pressure"
- **Physiological Origin:** Metabolic waste accumulation reaching threshold
- **Innate Reflexive Loop:** Excretion: finding appropriate

location for voiding

These closed loops are neural circuits pre-set in the evolutionary process, the most direct and firm connections between sensation and action. They guarantee that at the most basic level, life can make irresistible responses to maintain its fundamental existence.

1.1.3 Systemic Sensation: The "Indifferent Sense" as Life's Background

Beyond specific Proto-Sensations, Sechenov's described "indifferent total sensation" — that "general bodily comfort or discomfort" — is precisely the **Systemic Sensation**, a comprehensive reading of the dynamic balance or imbalance of all Proto-Sensations.

It is not an independent sensation, but the **comprehensive reading** of dynamic equilibrium or disequilibrium among all Proto-Sensations. When uncomfortable tensions like hunger, pain, and fatigue are at low levels while satisfaction and comfort dominate, the system presents a background of "comfort," allowing vital energy to flow. Conversely, when multiple uncomfortable tensions intensify and persist, the systemic background shifts to "discomfort," driving the individual toward more fundamental adjustments. This

background is the **Youjue System's** overall assessment of its own state of existence, the deep seabed upon which emotions and consciousness rise and fall.

1.1.4 The Essence of Proto-Sensation: Infringement and Calibration of Innate Expectancy Sensation

Proto-Sensations such as pain, hunger, and nausea are typically understood as simple signals of homeostatic imbalance. However, viewed from the deep dynamic structure of the **Youjue System**, they reveal a more fundamental principle: all "unwellness" originates from **Expectancy-Sensation Mismatch**. To understand this, we must first introduce the foundational concept of "**Innate Expectancy Sensation**."

1. Innate Expectancy Sensation: The Evolutionary-Endowed Life Baseline

Before an individual life begins its journey of experience, its system is not a blank slate. Through eons of phylogenetic shaping, the organism carries an intrinsic preset about its own "ought-to-be state" deeply imprinted in its genes. This preset is not a concrete image, but a **diffuse, value-laden tension balance baseline** that constitutes the **Innate Expectancy Sensation** of the life system. It

is mainly manifested in:

- **Preset ranges for homeostatic parameters:** ideal equilibrium points and acceptable fluctuation ranges for body temperature, blood pressure, blood glucose concentration, and fluid osmotic pressure, all evolutionarily preset "standard values."
- **The "gravitational center" of the three-tension balance:** the optimal synergistic state of the three basic driving forces — **Defensive** (boundary integrity), **Offensive** (energy balance), and **Friendly** (rhythmic continuation) — constituting the deep value orientation for systemic operation.
- **Initial expectations for regularity and causality:** the nervous system is innately inclined to seek patterns and regularities in sensory input, instinctively generating attention and vigilance toward completely random noise or events that violate physical constants (such as objects suddenly disappearing).

This **Innate Expectancy Sensation** is the condensation in genes of the "successful experiences" a species has hammered out in the survival competition, providing each newborn life with initial self-guidance for survival.

2. Proto-Sensation as Expectancy-Sensation Mismatch: An Alarm Against Innate Expectancy

When an organism's immediate state deviates from the evolutionary preset baseline described above, it means that immediate sensation has fundamentally conflicted with **Innate Expectancy Sensation**.

- **Pain** is the immediate sensation of tissue damage, violently violating the body's **Innate Defensive Expectancy** of "being in an intact, undamaged state."
- **Hunger** is the immediate sensation of energy deficiency, persistently violating the system's **Innate Offensive Expectancy** of "maintaining adequate energy reserves."
- **Choking Sensation**—is the immediate sensation of oxygen deprivation, fatally violating the physiological **Innate Rhythmic (life-continuation) Expectancy** that "gas exchange should be smooth."

Therefore, the innate "unwellness" signaled by Proto-Sensations is, in essence, the most primitive and intense **Expectancy-Sensation Mismatch** triggered when immediate physiological sensation severely mismatches "Innate Expectancy

Sensation." It is not a passive biochemical signal, but an active, value-loaded **systemic assessment report**, declaring that the system's current state has deviated from its evolutionarily preset survival trajectory, and driving the corresponding preset innate behavioral closed loop (such as withdrawal, foraging, or respiratory struggle) for emergency recalibration.

This perspective anchors the principle of Expectancy-Sensation Mismatch at the very foundation of life: **life has been an "expecting" system from its very inception; its most fundamental "unwellness" stems from departure from its deep evolutionary expectations.** This lays a unified logical cornerstone for understanding more complex psychological and social discomfort in learned experience.

1.1.5 Cornerstones for Building World Models: Other Innate Sensation-Behavior Closed Loops

Beyond Proto-Sensations that directly serve Homeostasis, organisms are equipped with a series of crucial innate Sensation-Behavior mechanisms. Their function is to **build a preliminary, stable, and operable world model**, providing a stage for more complex interactions.

- **Visual Orientation and Tracking**
 - ◆ **Sensation:** Innate sensitivity to **moving objects** in the visual field.
 - ◆ **Innate Behavior:** Eyes automatically follow moving objects (such as a mother's face).
 - ◆ **Function: Locking and identifying** potential targets (prey, partners, or threats) in the environment, the visual foundation for **exploratory** behavior.
- **Novelty Orienting Reflex**
 - ◆ **Sensation:** Curious alertness to **sudden, novel, or uncertain** stimuli.
 - ◆ **Innate Behavior:** Sudden head turning, pupil dilation, sensory orientation toward the stimulus source, cessation of bodily activity.
 - ◆ **Function:** A **reconnaissance-defensive** response. Pausing current activity to assess the potential significance of new stimuli (threat or opportunity?), the starting point for learning and adaptation.
- **Chemosensation and Instinctive Approach/Avoidance**
 - ◆ **Sensation:** Innate likes/dislikes for specific odors.

- ◆ **Innate Behavior:** Aversion to decaying odors (frowning, head turning); preference for sweetness and milk scent (sucking, approaching).
- ◆ **Function: Innate environmental value tags**, directly guiding approach to benefits and avoidance of harm, the chemical outpost for **safety/territory defense** and **nutrition/resource acquisition**.
- **Proprioception and Postural Adjustment**
 - ◆ **Sensation:** Direct sensation of limb position, muscle tension, and bodily balance.
 - ◆ **Innate Behavior:** Sucking reflex, grasping reflex, stepping reflex, balance adjustment.
 - ◆ **Function: Building the body schema**, maintaining effective behavioral posture, the spatial foundation for all purposeful action.

Together with Proto-Sensations, these innate closed loops collectively build **automated safeguarding mechanisms** for the organism's initial survival, and provide a foundational guiding framework for its interaction with the environment. They offer indispensable underlying scaffolding for all subsequent experiential

learning, social interaction, and cognitive leaps. Upon them, the magnificent edifice of **Youjue** can begin its splendid construction.

1.2 The Systemic View of Innate Reflex: Closed Loop Rather than Isolated Arrow

In traditional physiology textbooks, "reflex" is often depicted as an arrow released from a bow: a stimulus necessarily elicits a fixed response. Although this unidirectional "stimulus-response" model is simple, it inadvertently fragments the integrity of life activity, reducing the living, continuous flow of life to isolated strings of neural firing. In this section, we will abandon this "isolated arrow" metaphor and replace it with a systemic view of the "closed loop." We will demonstrate that all innate reflexes are, in essence, the shortest and most robust links in the fundamental life cycle of "Sensation-Behavior," serving as the intrinsic adaptive wisdom for maintaining system stability and responding to external challenges.

1.2.1 Redefining "Reflex": A Micro Closed Loop Serving Homeostasis

From the perspective of the **Youjue System**, an innate reflex is by no means a one-time neural event, but a miniature, pre-set "Sensation-Behavior-Sensation" closed loop. Its fundamental

purpose is to serve the maintenance of **Homeostasis** at the fastest possible speed, acting as a pre-set adaptive response mechanism for the system to cope with specific challenges.

Let us take the classic flexion reflex (such as quickly withdrawing a hand upon touching something hot) as an example to dissect its closed-loop nature:

1. Sensation Input: A noxious stimulus (high temperature) activates nociceptors, generating the **Proto-Sensation** of "pain" (**Defensive** tension).

2. Central Processing: The signal is transmitted to the spinal cord and integrated through minimal synapses (usually monosynaptic or oligosynaptic).

3. Behavioral Output: Motor neurons generate neural firing, causing flexor muscles to contract and extensor muscles to relax, completing the hand withdrawal action.

4. Loop Closure Completion and New Sensation Generation:

- **Behavior directly changes sensation:** The hand leaves the heat source, and the sensation input of pain is removed.
- **Systemic state change:** The limb is preserved, and the threat to **Homeostasis** is eliminated.

- **New sensation emerges:** The pain may shift to a residual burning sensation, accompanied by a series of new **Systemic Sensations** such as accelerated heart rate and elevated vigilance. This complex sensation caused by reflexive behavior lays the fundamental precondition for subsequent sensation differentiation and behavioral selection driven by experience.

Therefore, the endpoint of a reflex is not the termination of movement, but the successful regulation of **Systemic Sensation**. This closed loop is a successful service of **Homeostasis**. If the reflex fails to eliminate the threat (for example, if the limb cannot be successfully moved away), pain signals will continue to be input, and the system will sense that the loop remains unclosed, potentially triggering stronger behaviors (such as the whole body rolling and struggling) or escalating into **Youjue** experiences of suffering.

1.2.2 Classification and Functional Matrix of Reflexive Closed Loops

Based on their complexity and function, we can classify the major **Innate Reflexive Loops** within the **Youjue** three-dimensional dynamic structure:

- **Defensive Protection**

- ◆ **Representative Reflexes:** flexion reflex, corneal reflex, sneeze reflex
- ◆ **Core Sensation (Tension Type):** pain, foreign body sensation (**Defensive**)
- ◆ **Behavioral Output:** withdrawal, eye closing, expulsion
- ◆ **Homeostasis Dimension Served:** boundary integrity
- **Nutritional Energy Acquisition**
 - ◆ **Representative Reflexes:** sucking reflex, swallowing reflex, rooting reflex (head turning to cheek-touch stimulus)
 - ◆ **Core Sensation (Tension Type):** hunger, oral tactile sensation (**Offensive**)
 - ◆ **Behavioral Output:** sucking, swallowing, head turning to search
 - ◆ **Homeostasis Dimension Served:** energy balance
- **Rhythmic and Developmental**
 - ◆ **Representative Reflexes:** grasping reflex, stepping reflex, Moro reflex (startle reflex)
 - ◆ **Core Sensation (Tension Type):** proprioception, imbalance sensation (**Friendly/Defensive**)
 - ◆ **Behavioral Output:** grasping, alternating stepping,

embracing action

- ◆ **Homeostasis Dimension Served:** body schema construction, bonding with caregiver
- **Environmental Exploration and Orientation**
 - ◆ **Representative Reflexes:** orienting reflex (head turning toward light/sound), eye tracking
 - ◆ **Core Sensation (Tension Type):** novelty sensation, visual motion (**Defensive**)
 - ◆ **Behavioral Output:** sensory orientation, target locking
 - ◆ **Homeostasis Dimension Served:** environmental model construction, potential opportunity/threat identification

This classification shows that reflexes are not disorderly; they systematically cover the three tension domains defined by **Proto-Sensation**, constituting the standard operating behaviors that the **Youjue System** has tempered through evolution to address basic survival problems.

1.2.3 Dynamic Characteristics of Reflexive Closed Loops

These pre-set closed loops are not rigid and unchanging; their operation exhibits typical dynamic characteristics that reflect the system's intrinsic regulatory capacity:

- **Threshold:** The minimum stimulus intensity required to trigger a reflex. Thresholds are adjustable; for example, in a state of high alert, the threshold for **Defensive** reflexes is lowered, making them easier to trigger.
- **Intensity and Gain:** The relationship between the magnitude of the reflex response and stimulus intensity. Strong pain triggers violent withdrawal.
- **Adaptability:** Under continuous, harmless stimuli, some reflexes weaken (such as adaptation to continuous mild tactile sensation), which avoids the depletion of systemic resources by irrelevant information.
- **Closed-Loop Competition and Integration:** When multiple reflexive closed loops are activated simultaneously, the system integrates them according to their biological "value ranking." For example, maintaining bodily balance (a **Defensive** function) may temporarily suppress a trivial scratch reflex.

1.2.4 From Isolated Closed Loops to Systemic Symphony: Integration of Multiple Reflexes

In real-life situations, isolated reflexive closed loops are rare. A stimulus often triggers multiple closed loops simultaneously or

sequentially, which interweave to form a coordinated **systemic symphony**.

Take "aspiration of a foreign object" as an example:

1. The foreign object contacts the laryngeal mucosa, first triggering the **Defensive** cough reflex (attempting forceful expulsion).

2. Simultaneously, the choking sensation (**Defensive Proto-Sensation**) rises sharply, triggering panic and struggling behavior (whole-body **Defensive** reflexes).

3. The face may flush due to oxygen deprivation; this is a physiological regulatory reflex.

4. If successfully coughed out, all reflexes subside, and **Systemic Sensation** returns from extreme "discomfort" to "comfort." If it fails, the system mobilizes all available resources until **Loop Closure** or system collapse.

This example demonstrates that reflexes constitute a real-time, instinctive **behavioral strategy repertoire** for the **Youjue System**. They form the bottommost, fastest execution layer of behavior, providing a stable platform and raw material for the more complex experiential behaviors and **Youjue** decision-making above them.

1.3 Neural Darwinism and the Generation of "Youjue"

The previous two sections depicted the macro blueprint of the **Youjue System**. This section will delve into its micro-level implementation, explaining how Gerald Edelman's theory of **Neural Darwinism** provides a dynamic interpretation for the generation of **Youjue**. We will strictly adhere to the fundamental principles of **Youjue Physiology**, reinterpreting its core concepts — **Global Brain Functional Cluster**, **Reentrant** signal cycling, and **Evaluative Sensation** — as concrete manifestations of the **Sensation-Behavior Cycle** at different levels.

1.3.1 The Neural Realization of "Youjue": The "Dynamic Core" as a Global Brain Functional Cluster

Edelman's proposed "**Dynamic Core**", viewed from its functional essence, is a **Global Brain Functional Cluster** at the whole-brain scale. It is not limited to the cortex alone, but is formed by **intense interaction between the thalamocortical system and key subcortical structures (such as the basal ganglia, amygdala, and basal forebrain)**.

Placing this concept within our framework, we propose:

- The **neural correlate of the dominant "Youjue" state at any given moment** is the specific activity pattern of this **Global Brain Functional Cluster**.
- The formation of this cluster is the result of competition and cooperation among different functional subsystems within the brain, following the selection principles of **Neural Darwinism**. This "Global Brain Functional Cluster," which is **selectively consolidated through evaluation by Valence Sensation**, represents the first functional **"circle"** formed by the **Youjue System** at the most microscopic scale. It signifies that an effective **Sensation-Behavior** pattern can emerge and stabilize from chaos through **"Resonance"** at the neural level and **"positive evaluation"** at the value level.
- The composition of the cluster is **dynamically changing**; within a few hundred milliseconds, a set of neurons forms a functional unity through intense synchronized firing, allowing different **Youjue** states such as "pain," "hunger," or "curiosity" to appear sequentially.

Thus, this **"Global Brain Functional Cluster"** is the physical embodiment of "Youjue." The emergence of a **Youjue** means that a

specific, distributed neuronal group has won out in competition and temporarily dominates the system's **Youjue** sensation and behavioral preparedness.

1.3.2 "Reentry" as the Neural Skeleton of the Sensation-Behavior Cycle

The dynamic integration of the "**Global Brain Functional Cluster**" relies on large-scale **signal cycling** within the brain — that is, the neural signal flow itself that constitutes the **Sensation-Behavior Cycle**, with two-way interactions. It includes classical ascending sensory transmission, descending modulation, and parallel, continuous dialogue among various brain regions.

This vast **signal-cycling network** is the **structural skeleton** through which the **Sensation-Behavior Closed Loop** is realized at the neural level:

- It achieves sensory integration: through the **cyclic back-and-forth of sensory signals among brain regions at different levels**, it integrates local features into a meaningful unified field of **Systemic Sensation**.
- It supports behavior generation: the process of **motor neural firing** is itself the result of cyclic processing among premotor

areas, the basal ganglia, and the cortex of **immediate sensation, re-sensation of past Sensation-Behavior Traces**, and the **Systemic Sensation** of the organism's interior.

- It ensures **Loop Closure**: new sensations produced by behavior enter the cycle as new inputs, to be compared with the **sensation of future reality** generated by the system based on past cycles. When a mismatch occurs, this "**Expectancy-Sensation Mismatch**" (such as the conflict between the expected flat ground and the actual drop when descending stairs) becomes a strong new **Systemic Sensation**, driving the system's learning and behavioral adjustment.

Therefore, the entire activity of the **Youjue System** is built upon this never-ceasing, multi-dimensional **neural signal cycling**. It is the physiological implementation form of "**Sensation-Behavior Closed Loop**" in the brain.

1.3.3 The Evolution of Sensation: Evaluative Sensation, Trace Sensation, and Expectancy Sensation

Within the **Youjue** framework, all mental activity can be reduced to the operation of **Systemic Sensation** across different time scales.

1. Evaluative Sensation: The Meta-Sensation About System State Quality

The essence of the diffusive modulatory systems in the brain is the organism's **continuous internal evaluation** of its own operational state. This evaluation itself is a **diffusive, value-related Systemic Sensation**.

- For example, the dopamine system's response to "prediction changes" essentially represents the system generating a **positive Evaluative Sensation** of "the current state is superior to past Sensation-Behavior Traces."
- Correspondingly, the norepinephrine system's response to uncertainty generates an **alert sensation of "environmental information is ambiguous,"** the embryonic form of negative emotion.
- **The release of neuromodulators is an internal behavior driven by this Evaluative Sensation**, whose purpose is to broadly modulate regional excitability, thereby establishing global emotional tone.

2. "Sensation-Behavior Traces" and Re-Sensation of Past Traces

- **Memory is not static storage of information, but "Sensation-Behavior Traces" left by past Sensation-Behavior Cycles on neural structures. Recall is not the simple reactivation of these traces, but the system's "re-sensation" of past sensory experience based on these traces.**
- This "re-sensation of traces" continuously dialogues and integrates with immediate sensory input through **Reentry**, jointly generating the singular **Youjue** field of the present moment. This is precisely the neural implementation of Edelman's "**The Remembered Present**," and is analogous to William James's concept of the "specious present."

3. Expectancy Sensation: Future Simulation Based on Sensation Traces

Prediction is not an abstract calculation; it is itself a "sensation about the future." It is a sensory expectation that the system generates about imminent reality based on **re-sensation of past Sensation-Behavior Traces**.

However, Expectancy Sensation does not have a single source.

It exists across a continuous spectrum from phylogeny to ontogeny:

- **Innate Expectancy Sensation:** As described in the previous section, this is the expectancy tendency shaped by evolution and built into genetic coding. It constitutes the **deep dynamic field and value baseline** of the system's predictive capacity, the gravitational center and constraining framework for all learned expectancy formation. It determines which sensation deviations are "important" and "urgent" (such as pain taking priority over mild itching).
- **Learned Expectancy Sensation:** This is the individual's prediction of specific objects and situations built through **Reentry** and learning based on **Sensation-Behavior Traces** accumulated across its life history. It enables the system to predict "approximately how high this staircase is" or "how this person might react."

The establishment of **Learned Expectancy Sensation** is never created in a vacuum, but rather carries out fine depiction and filling on the value blueprint outlined by **Innate Expectancy Sensation**. For example, the learned expectancy that "food can bring pleasure" is grounded in the higher-order realization of the innate **Offensive**

expectancy of "energy balance." The two work in synergy: innate expectancy provides deep motivation and direction, while learned expectancy provides more refined guidance within specific contexts.

Thus, all "Expectancy-Sensation Mismatch" — whether innate pain or learned disappointment — shares the same essence: immediate sensation has undergone identifiable conflict with (innate or learned) Expectancy Sensation. This conflict signal drives the system to readjust its behavior and update its expectancy model, thereby becoming the ultimate engine of life learning, adaptation, and growth.

Chapter 2: Sensation Differentiation and Behavioral Selection

2.1 Refinement of the Sensation-Behavior Closed Loop

On the stable substrate provided by innate reflexes, the **Youjue System** begins its course of growth. The essence of this process is not random construction upon a blank slate, but rather an adaptive generative process in which the entire **Sensation-Behavior Closed Loop**, under the judgment of originary **Valence Sensation** (rooted in innate expectancy), and driven by **Expectancy-Sensation Mismatch**, moves from crude and inefficient toward precise and efficient. This section will reveal how that diffuse sense of "good" or "bad" guides the system, in learned experience, to select and differentiate specific patterns of precise interaction with the environment, and in this process construct a complex network of **Learned Expectancy Sensation**.

2.1.1 Embodiment of Valence Sensation: From Diffuse Evaluation to Selection of Specific Closed Loops

On the stable substrate provided by innate reflexes, the **Youjue**

System begins its course of growth. The essence of this process is an adaptive selection process in which the **Sensation-Behavior Closed Loop**, as a functional unit, moves from chaotic and inefficient toward ordered and efficient, driven by evaluation from ordinary **Valence Sensation**.

The innate value system (such as the brainstem system involving dopamine and norepinephrine) provides a diffuse bodily sense, which is a primitive **Evaluative Sensation** about the system's internal state concerning "fit" or "unfit." It does not point to any specific content in itself; its meaning must be "embodied" and "realized" through the success or failure of the **Sensation-Behavior Closed Loop** in experience. It must be clearly stated that the ultimate criterion for this "good" or "bad" is rooted in the **Innate Expectancy Sensation** described in Chapter 1 — that is, when the systemic state approaches or satisfies the evolutionary presets concerning **Homeostasis** balance, boundary safety, and rhythmic smoothness, positive **Evaluative Sensation** emerges.

- **Initial State:** The system is in a generalized preparatory state, where various potential Sensation-Behavior links may be triggered randomly.

- **Sensory Evaluation and Closed-Loop Selection:** When a closed loop's operational outcome aligns with the system's innate value orientation (i.e., satisfies some deep innate expectancy), it triggers a positive **Evaluative Sensation**. This diffuse "good" feeling, through its widespread projection, non-specifically enhances connections between neural clusters that are synchronously active at that moment. Consequently, the specific **Sensation-Behavior Closed Loop** that happens to lead to positive efficacy is consolidated by the mechanism of **Value-Dependent Selection**. **Valence Sensation**, by selecting a successful specific closed loop, achieves its own first "embodiment."

2.1.2 Extension and Differentiation of Value: Constructing Goal Hierarchies Through Closed-Loop Sequences

Once some initially neutral **Sensation-Behavior Closed Loop** is consolidated because it can reliably predict or lead to innate value, it begins to acquire value. This means that the initiating sensation of that loop itself can trigger positive **Evaluative Sensation**.

- **Emergence of Goals:** At this point, this "acquired value" sensation becomes a new, intrinsic "goal sensation." This is

essentially the birth of **Learned Expectancy Sensation** — the system begins to "expect" that achieving this closed loop will bring satisfaction.

- **Construction of Sequences and Transmission of Value:** To achieve this new goal, the system needs to develop more anterior, instrumental **Sensation-Behavior Closed Loops**. For example, a sound (a neutral cue) acquires value because it can predict a visual stimulus that already has acquired value. To "hear this sound," the system must differentiate the refined closed loop of auditory discrimination-orienting eye movement. Thus, that originary, diffuse **Valence Sensation** (stemming from innate expectancy) is transmitted backward like a relay through a chain of successful **Sensation-Behavior Closed Loops**. With each transmission step, **Valence Sensation** differentiates and embodies itself in a more concrete, more refined Sensation-Behavior pattern. From this, the complex network of **Learned Expectancy Sensation** is generated, which is essentially the intelligent, contextualized "**pathfinder**" and "**strategy repository**" for realizing deep innate expectancies (such as acquiring nutrition, ensuring safety).

2.1.3 "Reentry" as the Internal Coordinator for Closed-Loop Optimization

In this process, the **Reentry** mechanism is not responsible for transmitting **Valence Sensation**, but rather for optimizing the internal coordination of the specific closed loop selected by **Valence Sensation**.

- Within the **Sensation-Behavior Closed Loop** (such as the mapping from visual processing brain areas to eye movement control areas), **Reentry** connections ensure that a continuous, content-specific dialogue and calibration can take place between the precise localization of sensory signals and the appropriate generation of motor neural firing.
- The diffuse signal of **Valence Sensation** acts like a **master selector**, determining which synaptic changes in these **Reentry** dialogues should be consolidated. It answers "whether" to remember this experience, while **Reentry** handles the specific details of "how" to better complete the experience.

2.2 Physiological Dynamics for Achieving Closed-Loop Optimization

The previous section depicted the macro picture of closed-loop

selection driven by **Valence Sensation**. This section will delve into its intrinsic dynamic level, elaborating the physiological mechanisms that support this selection and optimization process. We focus on the nervous system as a living system, its intrinsic, teleological self-adjustment activities. The core lever of all these activities is the establishment of "**Expectancy Sensation**" and the continuous calibration achieved through "**Expectancy-Sensation Mismatch**."

2.2.1 Hebbian Plasticity: Trace Consolidation Tuned by Life Value

Hebb's law describes the basic phenomenon of activity-dependent neural connectivity. Within the **Youjue** framework, we understand it as follows: when neuronal clusters are activated together, they tend to form a functional unity. If the outcome of this unity's activity is judged by the life's **Valence Sensation** as "fit," then their connections will be consolidated.

- When a **Sensation-Behavior Closed Loop** is operating, a specific, distributed neural functional cluster is co-recruited and activated, and the activity pattern of this cluster specifically corresponds to the operation of that closed loop.
- At this moment, if the outcome of this closed loop (such as

relieving hunger/thirst or successfully avoiding danger) triggers a positive, diffuse **Evaluative Sensation** (activation of the value system), then this "good" feeling from the depths of life, like a chemical messenger, "empowers" the neural co-activation at this moment, making the trace it leaves particularly deep and lasting.

- Conversely, without the empowerment of this **Valence Sensation**, the corresponding co-activation will be like footprints on sand, quickly erased by the tide of time.

Therefore, the Hebbian phenomenon is the nervous system's potential ability to record co-activation, while **Valence Sensation** is the arbiter that endows it with biological meaning and determines whether its trace can be retained long-term.

2.2.2 The Physiology of Expectancy: The Spectrum of Expectancy Sensation and the Drive of Expectancy-Sensation Mismatch

The nervous system is by no means a passive receptor waiting for stimuli. It is always in an active state of readiness, which itself is a kind of "**Expectancy Sensation.**" However, it must be recognized that **Expectancy Sensation** possesses a profound spectrum

from phylogeny to ontogeny:

1. Dual Roots of Expectancy

- **Innate Expectancy Sensation:** As described in Chapter 1, this is the diffuse preset about the system's own "ought-to-be state" shaped by evolution. It manifests as thresholds for **Proto-Sensation**, baselines for the balance of the three tensions, the seeking of regularity, and instinctive vigilance toward mutations. It is the **deep value anchor and generative background** for all expectancy sensations.
- **Learned Expectancy Sensation:** Based on the individual's unique "**Sensation-Behavior Traces**" (memory), the system forms specific expectations about particular objects, situations, and causal relationships. It is the "**personalized guide**" and "**flowing behavioral strategy repository**" for innate expectancy in the world of experience. It may be diffuse (such as a creative impulse) or precise (such as an estimate of object weight), and is always in flux.

2. Expectancy-Sensation Mismatch as a Unified Learning Signal

When **Immediate Sensation** undergoes identifiable mismatch with **Expectancy Sensation** at any level, "**Expectancy-Sensation**

Mismatch" is produced. This is the fundamental intrinsic drive that propels system updating, learning, and adaptation:

- When the expected "solid ground" sensation at the soles of the feet fails (violating experience-based **Learned Expectancy**), it creates a mismatch of bodily imbalance, driving immediate adjustment of the motor system.
- When ingesting spoiled food (its taste violently conflicts with the innate expectancy of "safe to eat"), it generates nausea (a strong, innate-level **Expectancy-Sensation Mismatch**), driving the vomiting reflex.
- When the results of complex social interactions do not match predictions (violating learned social expectancy), it generates confusion or unease (mismatch at the level of social cognition), driving reflection and updating of behavioral strategies.

3. Essence of Closed-Loop Optimization: Collaborative Calibration Across Expectancy Levels

The refinement process of the **Sensation-Behavior Cycle** is essentially **the calibration and upgrading of the expectancy sensation spectrum itself**. **Learned Expectancy Sensation** becomes increasingly precise and efficient through countless corrections by

"Expectancy-Sensation Mismatch"; and the direction, motivation, and value boundaries of this refinement process are always guided and constrained by the deep gravitational field set by **Innate Expectancy Sensation** (approaching balance, avoiding threats, continuing rhythms).

For example, the amazing "feel" of a micro-engraving artist is the peak embodiment of **Learned Expectancy Sensation** (extremely fine expectations of force, angle, and material texture) under the traction of the deep motivation of "pursuing operational perfection" (serving the sense of control and efficacy within innate **Offensive** expectancy), repeatedly driven, selected, and consolidated by countless tiny **"Expectancy-Sensation Mismatches."** Every successful **Loop Closure** is an instant of perfect matching between expectancy and reality, and a moment when systemic value is confirmed.

2.2.3 Synergy of Life Dynamics: Coordinating Under Value Guidance

Valence Sensation and **Expectancy Sensation** jointly constitute the life dynamics of self-optimization in the **Youjue** system:

1. Macro Guidance by Value: Diffuse Evaluative Sensation

(good/bad) judges the **survival utility** of a **Sensation-Behavior Closed Loop** in an ultimate sense, determining the system's **general forward direction**. It answers the question: "**Does this path lead to where life should fit?**"

2. Micro Calibration by Expectancy: The concrete **Expectancy Sensation** and the "**Expectancy-Sensation Mismatch**" produced when it mismatches drive the system to perform **fine, real-time internal calibration** in each specific interaction. It asks the question: "**On this path, is my next step stable and accurate?**"

Valence Sensation delineates a broad "fit domain" for systemic learning, while the **Expectancy-Sensation Mismatch** produced by the mismatch between expectancy and reality acts like a strict coach, urging the system to make the most precise and efficient actions within that domain.

2.3 Brief Summary

Sensation differentiation and refined selection of behavior are not blind trial-and-error, but rather a precisely driven generative process within the value gravitational field laid down by **Innate Expectancy Sensation**, propelled by the universal learning signal of "**Expectancy-Sensation Mismatch.**" Every **Expectancy-**

Sensation Mismatch marks a learning opportunity; every successful **Loop Closure** is not only a verification and reinforcement of **Learned Expectancy Sensation**, but also, fundamentally, an approach to and satisfaction of deep **Innate Expectancy**. The "growth" of life thus manifests as the continuous enrichment, calibration, and realization of its intrinsic expectancy spectrum — a magnificent epic from rigid evolutionary presets to fluid individual wisdom.

Chapter 3: Generation of the Social and Noetic Strata

3.1 The Birth of Social Youjue: Resonance and Expansion of Common Sensation

The birth of sociality does not stem from a single dynamic. It is first rooted in the innate closed loop of "sex/reproduction" in the **Vital Stratum**, which is the **primordial foundation**; subsequently, in experience, through the convergence and resonance of "Sensation-Behavior" patterns between **Youjue Systems**, broader and more complex connections are formed, which is the **secondary foundation**.

3.1.1 Prototype of Sociality: Beginning with Sensation-Behavior Resonance in Single-Celled Organisms

Before discussing the sociality of higher animals driven by "sex/reproduction," we must turn our gaze to the most primitive starting point of life condensation phenomena. Sociality, the coordination of multiple independent living systems for joint survival advantage, is already embedded in its most primitive form within single-celled life.

Bacterial "quorum sensing" provides a perfect illustration: individual bacteria continuously secrete and detect specific chemical signal molecules. When the density of similar individuals in the environment reaches a certain level, the concentration of signal molecules correspondingly breaks through a critical threshold. At this point, all bacteria do not simply "perceive" the environment but, based on this shared chemical "sensation" input, **synchronously enter** a dynamically emergent synergistic state, such as bioluminescence, biofilm formation, or toxin release.

From the **Youjue** perspective, this process clearly presents a miniature yet complete **"Resonance-Evaluation-Consolidation"** closed loop:

1. Common Sensation: All individuals share the ability to detect the same chemical signal concentration (group density).

2. Behavioral Synchronization: Threshold breakthrough, as a strong systemic signal, triggers preset, goal-directed collective behavior.

3. Resonance and Consolidation: Individuals achieve precise synchronization of "Sensation-Behavior patterns" through chemical mediation, forming a functionally unified temporary group. This

pattern, because it can bring significant survival advantages (such as biofilm providing protection or group attack improving efficiency), receives **positive biological value evaluation** and is thus consolidated in genes by natural selection.

Therefore, the most profound starting point of social **Youjue** is this life-organizing tendency to achieve pattern matching (Resonance) through shareable "sensation" signals and to selectively stabilize it through the resulting joint functional advantages (Value). This establishes the fundamental logical prototype for all more complex forms of sociality.

3.1.2 Primordial Foundation of Sociality: Bloodline Bonding and Inherited Sensation Patterns

In higher organisms, especially animals, the most solid and direct primordial foundation of sociality lies in blood relationships formed through the drive of "sex/reproduction." This is not only a biological connection but also the basis for innate similarity in Sensation-Behavior patterns.

- **Closed Loop of Sexual Desire: The Primordial Drive Creating Bloodlines**

Sexual desire, as a powerful, periodic **Friendly Proto-**

Sensation, directly drives courtship and mating behavior. Its biological efficacy is the creation of offspring sharing genes, establishing the most primitive biological connection between two or more individuals.

- **Closed Loop of Parental Investment: Compulsory Selection Deepening Bloodline Bonds**

The appearance of offspring presents entirely new systemic sensation challenges. The vulnerability of the young (such as crying, cold) triggers a strong new **Systemic Sensation** in the parental system — a "**caring impulse**" that mixes **Defensive** (vigilance to threats) and **Friendly** (orientation toward care) tendencies. Parental investment behaviors such as nurturing and protection can alleviate this tension and bring deep satisfaction of "bloodline continuation" (a positive **Evaluative Sensation**). This closed loop of "offspring sensation-behavior → caring impulse → parental behavior → tension relief" is the first **stable and high-cost "social behavioral closed loop,"** directly giving rise to the strongest **Altruistic Attachment**.

- **Genetic Common Sensation Baseline**

Because blood relatives share genes, there is natural similarity

in the structural function of their nervous systems, thresholds for **Proto-Sensation**, and styles of innate behavioral closed loops. This **genetic similarity of sensation patterns** provides an irreplaceable biological platform for deep empathy and cooperation, constituting the unshakable **primordial foundation** for higher animal sociality.

3.1.3 Secondary Foundation of Sociality: Shaping and Recognition of Common Sensation-Behavior Patterns

Beyond bloodlines, the broader horizon of sociality is supported by the **secondary foundation** of "common Sensation-Behavior patterns."

- **Shaping by Common Environment:** Groups living in the same geographical environment and facing similar survival challenges develop convergent coping strategies. These strategies precipitate as shared **Sensation-Behavior patterns**. For example, maritime peoples' vigilance and coping styles toward wind and waves, or grassland peoples' visual experience and movement patterns in vast spaces. **The common environment shapes a common world of sensation and a repository of responses.**
- **Inscription by Common Culture:** Language, customs, rituals,

art, and values are essentially a vast system of "**Sensation-Behavior Traces**" shared by group members. Learning culture is the process of internalizing others' Sensation-Behavior patterns into one's own nervous system through **Reentry** and imitation. A person whose heart surges upon hearing the national anthem has internalized the nation's historical emotions as a strong personal **Evaluative Sensation**.

- **Essence of Empathy and Compassion:** Its neural mechanism based on **Social Sensation-Behavior Resonance** allows an individual to partially **re-sense** another's sensory state. Its psychological essence is precisely the ability to understand and simulate others' Sensation-Behavior patterns based on one's own **Sensation-Behavior Traces**. The more common patterns there are, the deeper and more accurate empathy becomes.

3.1.4 Three-Dimensional Dynamic Structure of the Social Stratum

Corresponding to the dual foundations of sociality, the Sensation-Behavior patterns of the **Social Stratum** also inherit the three-dimensional dynamic structure of the **Vital Stratum**, unfolding in more complex interactions:

1. Defensive → Group Belonging (Safety)

- **Sensation: Belonging**, that is, identification with and dependence on the group of "us." It stems from the **sense of security** the individual obtains within the group, the positive expectancy and re-sensation of the closed loop that "the group can effectively resist internal and external threats."
- **Behavior:** Boundary-drawing, common defense, maintaining group purity.

2. Offensive → Hierarchical Status (Nutrition/Resource Acquisition)

- **Sensation: Status**, that is, the systemic sense of one's influence over resource distribution and decision-making within the group. It is essentially the refined manifestation of **Offensive** tension in the **Social Stratum** (resource acquisition).
- **Behavior:** Competition, display, cooperation and alliance — behavioral strategies aimed at elevating or maintaining one's status.

3. Friendly → Altruistic Attachment (Species Continuation and Individual Emotional Bonding)

- **Sensation: Altruistic Attachment**, that is, deep emotional

bonding directed at specific objects, transcending immediate benefit calculations. Outside blood relations, it manifests as profound friendship, the pure emotional expression of **Friendly** tension at the **Social Stratum**.

- **Behavior:** Selfless help, sharing, care, and commitment.

3.1.5 From Circles to Civilization: The Expansion Logic of the Social Stratum

The expansion of social structure follows the principle of similarity in "common Sensation-Behavior patterns":

- **Tight Circles:** With **bloodline (primordial foundation)** and **high-frequency interaction (secondary foundation)** at their core, Sensation-Behavior patterns are highly synchronized, forming the strongest bonds (such as family and close friends).
- **Expanded Circles:** Based on **shared culture, values, or professional skills (secondary foundation)**, Sensation-Behavior patterns are highly similar in specific domains, forming ethnic groups, industry associations, schools of thought, etc.
- **Imagined Community:** Based on **collectively internalized abstract symbol systems** (such as nation, ideology), countless strangers develop strong "**Resonance**" because they share a

grand "Sensation-Behavior" narrative. This sense of belonging, as a powerful **"positive evaluation,"** tightly binds countless individuals into the grand **"social circles"** known as ethnicity, culture, or faith.

3.1.6 From Animal to Human: The Revolutionary Shift in Social Cornerstones

The most profound difference between animal and human society is not the presence or absence of sociality, but the fundamental shift in **the dominant cornerstone** upon which sociality is built.

1. Animal Society: Limited Expansion Dominated by "Primordial Foundation"

- The scale and complexity of animal social structures are **strictly limited by blood relationships and inherited sensation patterns (primordial foundation).**
- Wolf packs, lion prides, ant colonies, and monkey troops all have core structures built upon kinship. Their cooperation, altruism, and hierarchical order can mostly be explained directly or indirectly by kin selection theory.
- Even when simple "cultural" transmission exists (such as tool-use skills in some apes), its scope and influence are extremely

limited, unable to break through the hard biological constraints of the primordial foundation. **Animal societies are relatively closed circles of Sensation-Behavior resonance, deeply imprinted by genes and bloodlines.**

2. Human Society: The Leap to "Secondary Foundation" and Unlimited Expansion

- Humanity has accomplished a social revolution: **the "secondary foundation," i.e., "Common Sensation-Behavior Patterns" shaped by culture, has replaced the "primordial foundation" and become the dominant force for building large-scale social coordination.**
- The **plasticity of culture** enables humans to break through the narrow limits of bloodline, incorporating countless strangers into a **shared "Sensation-Behavior field."** A programmer in a big city and a herdsman in a border region can develop a strong sense of belonging and act in concert due to shared identification with an ethnicity or an ideology.
- The emergence of **abstract symbol systems** (such as language, writing, law, currency) allows complex "Common Sensation-Behavior Patterns" to be precisely encoded, transmitted over

long distances, and accumulated across generations. This enables the scale and organizational complexity of human society to achieve exponential growth, from tribes and chiefdoms to nation-states and global civilization.

- **Therefore, the essence of human society is an open, continuously reconstructable "imagined community of sensation-behavior" built upon the secondary foundation of culture.** Bloodline remains important, but it is no longer the **primary basis** for constructing large-scale social order.

3.2 Emergence of Noetic Youjue: Propagation and Creation of Thought Memes

When the **Youjue System** takes the activity of its own internal nervous system as the object of **Sensation** and can elicit new neural activity in response, the **Noetic Stratum** is born. Here, we establish a fundamental principle: subjective cognition *is* subjective **Sensation**. All internal activities called "thought," "reasoning," and "imagination" are, without exception, specific "**Sensation-Behavior**" processes occurring within the brain's neural system. When we "think" about a concept, we are **Sensing** the pattern of neural activation associated with that concept.

3.2.1 The "Youjue" Foundation of Cognition: Internal Neural Activity as Sensation Object

This is the key to understanding the **Youjue** characteristics of the **Noetic Stratum**. In the cognitive process, the brain's **Sensation** input largely originates from its own internal activity.

- **Generation of Internal Sensation:** There exists a unique "**Sensation**" whose object is precisely the brain's own neural activity — the flash of recall, the activation of concepts, the advance of reasoning are themselves **Systemic Sensation** at the **Noetic Stratum**. This "Sensation of neural activity itself" is manifested on two specific levels:
 - ◆ **Sensation of Activity Content:** Directly **Sensing** specific thought content such as the concept "apple" or "logical relations."
 - ◆ **Sensation of Process Quality:** The "fluency," "excitement of a flash of insight," or "blockage" presented by the thinking process itself.

These sensations of thought content and sensations of process quality together constitute the **Youjue** state of the **Noetic Stratum**.

- **Triggering of Internal Activity:** Based on the above **Internal**

Sensation, the system elicits new internal neural activity as a "**Behavior**" response. For example, when **Sensing** "reasoning blockage," the system may autonomously and agentially attempt to activate another related concept trace or change thinking strategy. This directed firing and reorganization of internal neural signals is itself a "**Behavior**," which can be called "implicit behavior" or "thinking action."

- **Internal Sensation-Behavior Cycle:** Thus, at the cognitive level, a complete "**Internal Sensation-Behavior Cycle**" is established: internal neural activity as **Sensation** input → elicits new internal neural activity as **Behavior** output → new internal neural activity generates new internal **Sensation** again. This self-constructed cycle within the cranium is the **Youjue** foundation for all higher cognitive functions such as thinking, imagination, and reasoning.

3.2.2 Three-Dimensional Dynamic Structure of the Noetic Stratum: Differentiation of Exploratory Space, Method, and Language

Following the same vein as the **Vital Stratum** and **Social Stratum**, the **Sensation** and **Behavior** of the **Noetic Stratum** are

likewise driven by the three basic tensions, and have undergone fundamental differentiation in exploratory space, research methodology, and linguistic form, forming the three pillars of human civilization.

1. Defensive → Scientific Exploration (Conquest of External Unknown)

- **Sensation:** Curiosity, expressed here as a **cognitive unease** triggered by the "unknown external world."
- **Behavior:** Scientific exploration. This is a systematic, high-level **Behavior** aimed at eliminating this cognitive unease.
- **Exploratory Space:** Directed at the external environment and objective objects.
- **Research Method:** Objectification. It strives to make "objects" out of everything it touches, even taking soul and spirit as objects of objective study.
- **Pursuit Goal:** Truth. The closer to truth, the more evident truth becomes.
- **Linguistic Form:** Uses logical language, whose semantic unit is schemes and formulas.

2. Offensive → Artistic Creation (Expression of Internal Energy)

- **Sensation:** The fullness and tension of internal emotion, feeling, and experience.
- **Behavior:** Artistic creation. This is the active externalization and shaping of internal **Sensation** energy.
- **Exploratory Space:** Shifts from external to the internal subjective domain.
- **Research Method:** Subjectification. It not only subjectifies humans and living beings but, through the artistic prism, **activates Offensive/Friendly Sensation concentration** in the viewer's mind toward inanimate objects.
- **Pursuit Goal:** Authenticity. The more subjective this authenticity, the more human it is, and the more it can evoke broad and profound **Resonance**.
- **Linguistic Form:** Uses poetic language, whose semantic unit is metaphor.

3. Friendly → Religious Cognition (Pursuit of Ultimate Fusion)

- **Sensation:** The longing for ultimate meaning, eternity, and infinity, and the recognition of one's own finitude.

- **Behavior:** Religious cognition. This is the cognitive effort to integrate one's tiny **Youjue** cycle into some grand, eternal closed loop.
- **Exploratory Space:** The domain of ultimate existence that simultaneously transcends and includes the subjective and objective.
- **Research Method:** Can be called a personalized method. It is neither purely objective nor purely subjective, but seeks connection with transcendence in profound personal experience.
- **Pursuit Goal:** Mystery. The deeper one goes, the broader and loftier it becomes; the more inconceivable it is, the more it inspires awe and wonder.
- **Linguistic Form:** Uses mystical language, whose semantic unit is symbolic signs.

3.2.3 Thought Meme: The Sensation-Behavior Carrier of the Noetic Stratum

At the **Noetic Stratum**, the carrier of the "**Sensation-Behavior**" Cycle is no longer concrete actions or chemical signals, but "**Thought Memes**."

- **Essence:** A **Thought Meme** (such as a scientific theory, a

melody, a belief) is a **replicable information unit that encapsulates a specific "Sensation-Behavior" pattern**. It contains both specific cognitive **Sensations** (such as Einstein's sense of cosmic harmony) and the corresponding cognitive **Behavior** pattern (such as expressing and exploring with mathematical equations).

- **Propagation: Thought Memes** are propagated from one **Youjue System** to another through imitation and learning. Successful propagation means the receiver, to a certain degree, regenerates cognitive **Sensations** similar to the transmitter's and adopts the relevant cognitive **Behaviors**. Scientific paradigms, artistic schools, and religious doctrines are all collections of **Thought Memes**.
- **Selection:** The survival of **Thought Memes** follows **Value-Dependent Selection**. A **Thought Meme** that can more effectively eliminate cognitive unease, express internal emotion, or provide ultimate meaning will be endowed with a **"positive evaluation"** by the system because of the cognitive satisfaction it brings. This evaluation prompts individuals who identify with it to form a **"cognitive circle"** (such as a scientific

paradigm or artistic school), and the **Thought Meme** is therefore widely copied and transmitted within that circle. An individual's acceptance of an idea is essentially that their internal cognitive activity "**Resonates**" with the external **Thought Meme**.

3.2.4 Cognitive Closed Loop: From Individual Contemplation to Civilizational Accumulation

The **Sensation-Behavior Cycle** at the **Noetic Stratum** constitutes a grand, accumulable "**cognitive closed loop**."

- **Individual Level:** A scientist conducts research (**Behavior**) driven by "curiosity," ultimately discovers patterns, **deepens understanding of the world, thereby satisfying specific cognitive needs** and completing a cognitive **Loop Closure**.
- **Civilizational Level:** The results of a successful individual cognitive closed loop (a new **Thought Meme**) are propagated through cultural media, selected by society, and consolidated into civilization's knowledge repository. This provides a higher starting point for the next generation, enabling human cognitive closed loops to **accumulate generation upon generation**, continuously approaching deeper and broader

unknowns, expressing more subtle interiors, and seeking loftier harmonies.

3.2.5 Apex of Cognition: Insight, Innovation, and "Supra-Consciousness" States

The highest-efficiency state of the **Sensation-Behavior Cycle** at the **Noetic Stratum** is manifested as **insight** and **innovation**. When the system conducts high-intensity **directed exploration** internally, that is, when it continuously performs **Reentry** operations and collisions on multiple **Thought Memes** (Sensation-Behavior Traces), once an entirely new connection pattern that can perfectly eliminate the core **Expectancy-Sensation Mismatch** is instantly selected, it triggers a strong, positive **Evaluative Sensation** and a dramatic release of cognitive tension. The sudden, efficient **Loop Closure** of this cognitive cycle is the subjective experience we call the phenomenon of **"insight" or "inspiration."** **Innovation**, then, is the realization in the external world of the new **Thought Meme** produced by this internal process. Therefore, the often mystically endowed **"supra-consciousness"** or creative thinking is here clearly interpreted as: the **peak Youjue state** that emerges when the **Sensation-Behavior Cycle** at the **Noetic Stratum**

achieves high levels of agency and effectiveness internally.

3.3 The Neural Basis of Social Sensation-Behavior Resonance

The previous two sections depicted the emergence of the **Social Stratum** and **Noetic Stratum** from the "**Sensation-Behavior Cycle**." A fundamental question is: how can a **Youjue System** understand the internal state of another system? This section will clarify that the so-called "mirror" phenomenon is not an independent "mind-reading" module, but rather the neural embodiment of the "**Social Sensation-Behavior Resonance**" ability that naturally emerges from the "**Sensation-Behavior**" closed-loop system on the basis of **Degeneracy**, through **Value-Dependent Selection** associative learning.

3.3.1 From "Mirror" to "Resonance": The "Youjue" Reconstruction of Social Understanding

Traditional "mirror neuron" theory is often misunderstood as an innate specialized "mirror" for mapping others' behavior. However, from the "**Youjue**" perspective, this should be understood as a form of "**Sensation-Behavior Resonance**."

- **Essence of the Mechanism is Associative Learning and Degeneracy:** There are no fixed neurons in the brain that are innately encoded for "others' behavior." Instead, when an individual repeatedly performs a goal-directed behavior (such as "grasping"), a "**Sensation-Behavior**" neural cluster containing motor neural firing, proprioceptive sensation, and successful expectancy (value) is consolidated. Due to **Degeneracy**, the "grasping" category can be realized by multiple different neuronal group combinations.
- **Birth of Resonance:** In an individual's developmental experience, "self-executed grasping" and "seeing others grasp" are highly statistically correlated in sensory input and share similar successful value. Through value-modulated Hebbian plasticity, strong associations are formed between the visual features of "seeing grasping" and the motor-sensory cluster of "executing grasping." Thus, when observing others' behavior, the observer can directly partially activate corresponding **Degenerate** "Sensation-Behavior" clusters in themselves.
- **Generation of "Direct Re-Sensation":** Therefore, understanding others' behavior is not cold calculation, but rather an

"internal simulation" or "neural reenactment" of the other's state by the observer based on their own **Sensation-Behavior** experience, thereby generating a "direct re-sensation" about the other's possible sensations that is somewhat different.

3.3.2 The "Youjue" Pathway of Empathy and Cultural Propagation

This "**Resonance**" mechanism provides the fundamental implementation pathway for social **Youjue**.

- **Physiological Essence of Empathy:** Emotional empathy is precisely the result of the resonant activation of the observer's own Emotion-related **Sensation-Behavior Traces** (such as facial muscle movement sensations during sadness, internal negative **Evaluative Sensations**) when observing others' emotional expressions (such as sadness).
- **Propagation Conduit for Cultural "Thought Memes":** Cultural "**Thought Memes**" such as dance, ritual, and artistic style are precisely complex, shared "**Sensation-Behavior**" patterns. The mirror mechanism allows these patterns to trigger similar neural **Resonance** across different brains through observation and imitation, thereby achieving efficient cultural

transmission and group identity. The reason a nation's dance can evoke **Resonance** is precisely that the sensorimotor systems in countless individual brains produce synchronized "internal reenactments" of the same set of movement patterns.

3.3.3 Degeneracy as Foundational Support

Degeneracy is the fundamental guarantee ensuring this social-cognitive system is both robust and flexible.

- **Novelty in Understanding:** When encountering a complex behavior never seen before, the system is not powerless. Relying on its **Degenerate** network, it can activate multiple existing, partially relevant "Sensation-Behavior" category clusters, and through **Reentry** integrate an optimal, approximate understanding (i.e., "classifying as the closest category").
- **Learning and Refinement:** Subsequently, through new **Sensation-Behavior** interactive experience, the system performs **Value-Dependent Selection** and refinement on this preliminary, fuzzy resonance pattern, eventually possibly forming a more precise new category, enriching its social-cognitive capacity.

3.4 Unified Generative Logic: The Organizational Law of Life Resonance

After traversing the magnificent panorama of **Social Stratum** and **Noetic Stratum** generation respectively, a stunning discovery floats before us: from the faint glimmer of nerve endings to the splendor of civilization's hall, the same deep and powerful rhythm echoes behind it. The organization of life, at different scales, actually follows a highly unified generative logic.

At the neural level, it is the large-scale "Reentry" signal cycling in the brain that triggers synchronized firing of neuronal clusters, forming intrinsic **Resonance**; if the activity results of this temporary functional unity are judged as "fit" by diffuse **Valence Sensation**, it receives **positive evaluation** and is selectively consolidated, forming a stable **Global Brain Functional Cluster** — the most microscopic "circle," the physical cornerstone of every effective **Youjue** state.

At the social level, it is the continuous interaction among individuals through language, behavior, and cultural symbols (social "Reentry") that shapes **Common Sensation-Behavior Patterns**, triggering **Resonance** among groups; when this common pattern

can bring satisfaction of belonging, status, or emotion, it constitutes a powerful social-level **positive evaluation**, which acts like adhesive, tightly binding countless individuals into nested "**social circles**" from family to nation.

At the cognitive level, it is the propagation and collision of **Thought Memes** through abstract symbols within and between systems (cognitive "Reentry") that, when they align with an individual's cognitive sensation structure, elicits intellectual or belief-based **Resonance**; a theory, a style, or a faith, if it can effectively eliminate cognitive unease, express the self fluently, or provide ultimate meaning, will receive **positive evaluation** at the cognitive level, thereby attracting followers and forming stable "**cognitive circles**" sharing the same paradigm, such as scientific communities or artistic schools.

This "**Resonance-Evaluation-Consolidation**" trilogy constitutes the universal algorithm by which the **Youjue System** builds itself across strata. It reveals to us that the internal cohesion of a scientific school and the stability of a neuronal functional cluster share the same deep organizational principle — they are both carriers of more optimized "**Sensation-Behavior**" closed loops

selected by the "value" at their respective levels.

Understanding this unified logic provides us with a key to interpreting all complex structures from mind to civilization. It lets us see that life is not only continuous in evolution but also unified and coherent in the core laws by which it builds its own complexity.

Chapter 4: Reconstructing the Mental Universe

4.1 Need: Action-Oriented Systemic Sensation Deviation

In traditional psychology and physiology, "Need" is often depicted as a drive or a state of deficiency. Within the **Youjue** framework, we will penetrate this surface appearance and point directly to its essence: **"Need" is the "Systemic Sensation deviation" within the Youjue System itself, and the "systemic tension" that emerges from it, oriented toward eliminating that deviation.**

4.1.1 The Essence of Need: As Action-Oriented Systemic Sensation Deviation

- **From Vital Stratum to Noetic Stratum: Unified Logic Across Levels**

1. Vital Stratum: Survival Needs with Proto-Sensation as Cornerstone

Here, **Need** manifests as the most fundamental **Sensation tension**, namely **Proto-Sensation**. Hunger and thirst are sensation deviations of energy and fluid imbalance; pain is a sensation deviation

of compromised tissue integrity; sleepiness and sexual desire are sensation deviations of rhythm and reproductive cycles. These **Proto-Sensations** are the direct embodiment of needs at the **Vital Stratum**.

2. Social Stratum: Relational Needs Derived from Interaction

Here, **Need** manifests as a **Systemic Sensation** based on interaction: **Loneliness** is a sensation deviation where "group belonging" falls below systemic expectancy; **inferiority** is a sensation deviation where "status" falls below expectancy; **alienation** is a sensation deviation of weakened **Altruistic Attachment** connection.

3. Noetic Stratum: Meaning Needs Emerging from Model Exploration

Here, **Need** manifests as **cognitive sensation tension**. **Curiosity** is a sensation deviation where "cognitive model completeness" has a gap; **sense of meaninglessness** is a sensation deviation where the connection between "individual behavior and grand value closed loop" is broken; **confusion** is a sensation deviation where the internal model mismatches external reality (**Expectancy-Sensation Mismatch**).

- **Unification of Need and Motivation:** The so-called

"motivation" is precisely the directness itself, driven by this "sensation deviation," aimed at achieving **Loop Closure**. **Need** is the "cause" (sensation deviation), and **motivation** is the "effect" (directed tension); the two are two sides of the same systemic state.

4.1.2 Need Satisfaction: Successful Loop Closure of Sensation-Behavior Cycle

The "satisfaction" of a **Need** is not the achievement of an abstract goal, but the successful **Loop Closure** of a concrete **Sensation-Behavior Cycle**.

- **Initiation of the Closed Loop:** Systemic tension triggered by "sensation deviation" (**Need**) drives the system to initiate **Behavior** (including overt actions and covert thought activities).
- **Closure of the Loop: Behavior** effectively changes the system's **Sensation** input, eliminating or reducing the initial "sensation deviation."
- **Reward of Value:** Successful **Loop Closure** triggers the system to generate a positive **Evaluative Sensation**. This pleasure and satisfaction is precisely the system's "confirmation signal" for this successful closed loop, and it selects and consolidates

the **Behavior** pattern that led to this success.

Thus, all life activities can be seen as the endless flow and iteration of countless **Sensation-Behavior Cycles** at different levels (where the initiation of the closed loop often stems from a systemic sensation deviation called **Need**), under the judgment of the **Value** system.

4.2 Emotion: The Systemic Regulatory Signal of Agentic Evaluation

Within the **Youjue** framework, we penetrate the phenomenological fog of **Emotion** and point directly to its core **Youjue** essence and systemic function: **Emotion** is the directional "**systemic regulatory signal**" produced after the **Youjue System** conducts a rapid, holistic evaluation of both "the deviation between current state and goal state" and "its own estimated capacity to eliminate this deviation." Here, the "goal state" is precisely the **Expectancy Sensation** formed by the system based on its innate baseline or learned experience; and the significant "deviation" between goal and reality itself constitutes a cognitive event that needs attention, often manifesting as **Expectancy-Sensation Mismatch**.

4.2.1 Polarity of Emotion: "Accelerator" and "Brake" as Systemic Regulation

The fundamental classification of **Emotion** stems from its fundamental direction as a regulatory signal.

- **Positive Emotion: The "Flow Reward" on the Agentic Journey**
 - ◆ **Generation Condition:** When the system evaluates that the **goal is meaningful** (high value) and that it **possesses the ability and means to achieve the goal** (high estimated agency), positive emotion emerges.
 - ◆ **Core Function:** It is not the "trophy" after achieving the goal, but the **"flow reward"** that the system harvests during the journey itself of "dynamically moving toward the goal." It acts as a **positive regulatory signal, strengthening** the current behavioral path, stimulating creativity, expanding the cognitive-behavioral **Repertoire**, and enabling the system to invest more deeply and persistently in the current closed loop. Joy, focus, hope, and love are all different aspects of this signal.
- **Negative Emotion: System Self-Correcting Signal**

(Correction Alarm)

- ◆ **Generation Condition:** When the system evaluates that the **goal diverges from value**, or that its current capacity/resources are insufficient to eliminate state deviation (low estimated agency), negative emotion sounds as an alarm.
- ◆ **Core Function:** It is absolutely not a "malfunction" of the system, but a vital **negative regulatory signal**. It **inhibits** the current ineffective or harmful behavioral path, **forces** the system to pause from the current closed loop, and redirects attention to re-evaluation of goals, methods, or one's own capacity. **Fear, anger, and sadness are essentially "directional regulatory signals for behavioral adjustment,"** manifestations of an organism's self-correction wisdom.

4.2.2 Dynamic Generation of Emotion: Evaluation and Feedback in the "Desire-Can-Act" Closed Loop

Emotion is tightly embedded in the core closed loop of Whyte's "Youjue Principle" — **"Desire (goal) - Can (evaluation) - Act (investment)."**

1. Goal Setting (Desire): The "discomfort" or "expectancy"

Sensations within the **Youjue System** emerge as goals.

2. Agency Evaluation (Can): The system instantly evaluates goal value and self-capacity. This evaluation result directly determines the polarity (positive/negative) and type of **Emotion**.

3. Behavioral Investment (Act):

- ◆ If evaluation is **high agency**, **positive Emotion** is generated, and the system invests in action with vitality.
- ◆ If evaluation is **low agency**, **negative Emotion** is generated, and system **Behavior** is inhibited, triggering a re-evaluation cycle of goals/strategies.

4. Dynamic Feedback: During "Act," the progress (or obstruction) of **Behavior** directly generates **Sensation patterns** that drive real-time agency evaluation, thereby causing **dynamic flux** of **Emotion**. A small success may turn anxiety into hope; an unexpected setback may plunge excitement into frustration.

4.2.3 Wisdom of Emotion: The Constructive Role of Negative Signals and Goal Adjustment

"Adjusting goals to strive for positive emotion" is precisely the pinnacle of the **Emotion System's** wisdom.

- **Negative Emotion is an Efficient Problem Reporting**

Mechanism: Pain reports tissue damage, anxiety reports insufficient capacity, and sadness reports the loss of important connections. They force us to face problems directly.

- **Strategic Switching from Negative to Positive:** When **negative Emotion** (such as frustration) reports that "this path is currently blocked," the system does not sit idle waiting for death. The discomfort provided by **negative Emotion** itself is the strongest motivation, driving the system to **actively adjust goals** (lower expectations, break down steps, change direction) or enhance capacity (learn, seek help). The essence of this adjustment is that the system seeks to reposition itself in a "**high-agency**" evaluative state in order to recapture the "flow reward" of **positive Emotion**.
- **Resilience of Life:** An individual's psychological resilience, creativity, and growth depend to a large extent on this dynamic circulation system of "**evaluation - adjustment - re-investment**" triggered by **negative Emotion** and driven by the pursuit of **positive Emotion**.

4.2.4 Dynamics and Traits of Emotion: Fading, Persistence, and Neural Soil

The regulatory function of **Emotion** is more fully demonstrated in its temporal dynamics and individual differences.

- **Fleetingness of Positive Emotion and Persistence of Negative Emotion:** This common phenomenon has profound adaptive logic.
- ◆ **Positive Emotion as "Pulse Signal":** Its function is to **strengthen a path proven effective**. Once the goal is achieved and the loop closed, its signal mission is essentially complete, fading rapidly so systemic resources can be directed toward new goals. Its fleetingness is necessary for the system to maintain vitality and forward-looking capacity.
- ◆ **Negative Emotion as "Sustained Background Negative Potential":** Its function is to ensure the system fully recognizes the failure of the current path or the severity of the threat, and has sufficient time for deep adjustment. Its persistence is the necessary price the system pays to avoid repeating mistakes and achieve profound learning. From an

evolutionary perspective, the cost of forgetting the Sensation-Behavior trace of a successful mating is far less than that of forgetting the trace of a predator attack.

From a dynamic mechanism perspective, the depth of this "background negative potential" directly sets the baseline threshold of the value-evaluation system: the deeper the potential, the greater the resistance that must be overcome to trigger a positive "pulse signal," while the negative "pulse signal," being highly resonant with the background, is more easily activated by weak stimuli. This is not a system malfunction, but a survival-level optimization of the **Youjue System** under extreme threat — a success can be forgotten, but a fatal attack must be eternally remembered. Therefore, traumatic closed loops are given ultra-high weight, forming continuously discharging "trauma clusters." Any related stimulus directly triggers a negative pulse, bypassing agency evaluation and causing pathological phenomena such as flashbacks.

- **"Youjue" Foundation of Personality:** The Neural Soil of Emotional Tendencies

The difference in people's ability to recover from **negative Emotion** and turn toward new goals constitutes the core of what we

call "personality" or "temperament." This ability is by no means pure rational choice; it itself depends on a more fundamental **Sensation**: namely, the "**sense of being capable of achieving new goals**" (a meta-sensation of one's own agency).

- ◆ An optimistic, resilient individual's nervous system (whether innately endowed or shaped through learning) more easily generates and credits this positive **Expectancy Sensation** of "I can do it" after setbacks, thereby more quickly initiating a new "Desire-Can-Act" closed loop.
- ◆ A neurotic or pessimistically inclined individual's system is more easily trapped in the "incapacity" and "hopelessness" **Sensation** field shaped by **negative Emotion**.

Thus, personality is essentially the dominant "Sensation-Evaluation-Response" pattern that the **Youjue System** has precipitated over long-term operation. The flexibility of **Emotion** regulation is the core indicator of the overall health and efficacy of an individual's **Youjue System**.

4.3 Consciousness: The Self-Illumination of Complex Sensation-Behavior Cycles

What is "Consciousness"? The difficulty of this so-called

"hard problem" may stem from the way we ask the question. We pursue "what it is," as if it were an independent "thing." Within the **Youjue** framework, we shift perspective: **Consciousness** is not a "thing," but a **process**, a **relationship**, a **phenomenon**. It is the **real-time, integrated "Youjue" itself** of the cyclic integration of the multi-level **"Sensation-Behavior Closed Loops"** of what is called the **Youjue System**, directed at its own vast and dynamic operational process.

4.3.1 Dissolving the "Hard Problem" of Consciousness: Self-Illumination as a Complex System

The so-called "hard problem" of Consciousness — how the physical brain produces subjective experience — within the **Youjue** framework, we provide a dissolution path based on living system dynamics. This path suggests that the "hard problem" of Consciousness may arise from a mistaken way of questioning, which presupposes a dualism between physical process and subjective experience. In this framework, we assert: **Experience is not a "ghostly" product of neural computation, but an irreducible relational attribute presented when the Sensation-Behavior Closed Loop system achieves its internal integration and self-**

regulation. Accordingly, subjective experience is not a mysterious epiphenomenon, but a natural, emergent **"Youjue" phenomenon** in the process of maintaining its survival closed loop.

- **Experience is not a product, but the activity itself:** We do not first have a sensation-less neural computation and then "add" a layer of subjective experience. **The specific complex, integrated mode of activity of the nervous system is itself an internal, self-reporting state, and this state is experience.**
- **"Youjue" as a natural attribute:** "Sentience" is not produced, but a natural relational attribute presented by a complex life system in the process of maintaining its **Sensation-Behavior Closed Loop**. When a system is complex enough to integrate internal and external sensations, **Sensation-Behavior Traces**, and value evaluation into a unified, self-regulating **Dynamic Core** through **Reentry**, **"Youjue"** or **Consciousness** emerges as a phenomenon. Just as "wetness" is a holistic property of the interaction of large numbers of water molecules and cannot be found in a single water molecule.

4.3.2 Neural Realization of Consciousness: The Dynamic Core as a "Youjue" Field

Drawing on and deepening Edelman's theory, we can locate the neural correlate of **Consciousness**; it is not a point but a **functional state**.

- **Global Workspace? No, it's the "Youjue Field":** **Consciousness** is not equivalent to information in some "global workspace." It is **the unified "Youjue" field constituted by the "Global Brain Functional Cluster" (Dynamic Core) that has won out in competition.** The content of this field is the "Sensation-Behavior" information processed by the system at this moment (including the **Sensation** of internal thought).
- **"Reentry" as the Glue:** The **Reentry** mechanism is the key to forming this unified **"Youjue" field**. Through continuous, parallel signal cycling, it **binds** distributed visual, auditory, somatosensory, emotional color, and thought fragments into a unified, coherent experiential scene. Without **Reentry**, there would only be a series of isolated signals, not a unified "stream of consciousness."

4.3.3 Function of Consciousness: Its Role in the "Youjue" Cycle

Consciousness is not an epiphenomenon that does nothing; it plays a vital role in the **Youjue System**.

- **High-Level Integration and Contextualization: Consciousness** integrates massive, potentially contradictory Sensation-Behavior clues into a "world model" and "self model" with **spatiotemporal continuity, causal relatedness, and value unity**. This provides the foundation for making coherent, flexible behavior in complex, changing environments.
- **Flexible Planning and Decision-Making:** By manipulating symbolic "**Sensation-Behavior Traces**" (**Thought Memes**), **Consciousness** enables the system to conduct **offline simulation**, mentally rehearsing various possible behavioral situations, thereby achieving future planning and fine control of behavior.
- **The Focus of Attention: The "Youjue" Continuum of Conscious and Subconscious**

We need not create a sharp divide between **Consciousness** and the subconscious. They constitute a "**Youjue**" **continuum**.

- ◆ **Consciousness** can be understood as the **focus of the "Youjue" System**, the set of information most intensely and clearly integrated and processed in the **Dynamic Core** at a given moment.
- ◆ **Subconscious** refers to those background **"Sensation-Behavior"** processes (such as visceral regulation, automated skills, unattended environmental noise) that have failed to enter the current **Dynamic Core** but are still modulating systemic state.
- ◆ **Attention** is the **directed movement and concentration of the "Youjue" focus within the "Youjue" field**, the process by which the system directs processing resources toward the most pressing **Sensation-Behavior Closed Loop**.

4.3.4 The "Youjue" Essence of Will: Competition Between Sensation-Behavior Closed Loops

Based on this framework, we can provide a clear **"Youjue"** definition of the traditional concept of **Will**: **Will is not an independent force, but the dynamic process of competition for systemic dominance among multiple parallel Sensation-Behavior closed loops when they are activated.** The most common

manifestation is the competition between closed loops driven by **internal sensations** (such as **Expectancy Sensations** for long-term health, social identity, or ideal self) and those driven by **immediate external sensations** (such as the immediate temptation of food or immediate avoidance of pain). So-called "exercising willpower" is essentially the process whereby **the closed loop driven by internal Sensation and value suppresses the closed loop driven by external Sensation in competition, ultimately gaining behavioral dominance**. Thus, the strength of "willpower" directly reflects the stability of the neural foundation of the closed loop anchored by internal **Sensation** and value, and its ability to win out in competition.

4.4 Self: The Core Reference Point of the Sensation Stream

After traversing the vast territories of **Need**, **Emotion**, and **Consciousness**, we finally arrive at the ultimate destination of "**Youjue**" exploration: the "**Self**." This seemingly stable, unchanging "**I**" at the core of personal identity, under the lens of "**Youjue**," will be revealed in its true dynamic nature: the "**Self**" is not a fixed entity, but a **core, pivotal "Youjue" reference point**

that is gradually precipitated and continuously reconstructed in its long life activities by the perpetually generating **"Sensation-Behavior"** closed-loop system, in order to maintain its own unity, continuity, and agency.

4.4.1 Generation of "Self-Sensation": Anchoring a Reference Point in the Sensation Stream

Life is an eternally flowing river of **Sensation-Behavior**. The emergence of **"Self-Sensation"** is a "navigational marker" produced by this river to orient itself.

- **Cornerstone of Bodily Self-Sensation and Proprioception:**
The most primitive **"Self" Sensation** originates from the body's direct spatial **Sensation** of itself. This is the initial demarcation between "I" and "non-I" in physical space.
- **"Mine" Sensation and Behavior:** The system uses **Reentry** to link immediate **Sensation**, initiated action, and past **"Sensation-Behavior Traces,"** forming a sense of ownership like "this is what I see," "this is what I do." This ownership of one's own mental and physical activity is the core component of **Self-Sensation**.
- **Construction of Narrative Self:** At the **Noetic Stratum**, the

system further integrates massive, fragmented **"Sensation-Behavior Traces"** into an "autobiographical story" with temporal span and causal logic. This constantly narrated and revised internal narrative constitutes the most familiar "I" with personal history.

4.4.2 Unified First-Person Perspective: "Self" as the Integration Center of Individual Sensation

The so-called "first-person perspective" is, in essence, the unique **"Youjue"** field integrated by this **"Self"** reference point. All **Sensations** — whether **Proto-Sensation** hunger, **Social Stratum** shame, or **Noetic Stratum** insight — are ultimately gathered, labeled, and unified under the **"I"** reference frame for experience.

- **"I" is the ultimate container of Sensation:** Pain is not abstract pain; it is **"my"** pain; thought is not free-floating thought; it is **"my"** thought. This label of "mine" is precisely the manifestation of the **"Self"** reference point performing its integrative function.
- **Anchor Point for Value Judgment:** The ultimate measure of all "fit" or "unfit" **Evaluative Sensations** is made relative to

the state of this **"Self"** reference point.

4.4.3 Unity of Self-Interest and Altruism: The Sensory Expansion and Contraction of Self-Boundaries

Now, we can use this framework to perfectly solve the unification problem of first-person and third-person perspectives and explain altruistic behavior.

- **Sensory Roots of Self-Interested Behavior:** Its advantageous **Sensation** directly stems from the maintenance of one's own bodily or mental state (**Proto-Sensation, Social Stratum Sensation**). **Behavior** aims to directly alleviate the discomfort within the **"Self"** reference point.

- **Sensory Roots of Altruistic Behavior:** Its advantageous **Sensation** stems from a more complex, social internal **Sensation**. Taking Simonov's rat experiment as an example:

- ◆ **Altruistic Rat:** The companion's defensive signals (screaming, odor), through the mechanism of **Social Sensation-Behavior Resonance**, trigger a strong "discomfort" in its brain based on the **expansion of "Self."** It incorporates the companion's suffering, to a certain extent, into the monitoring and regulation scope of its own **Youjue System**,

that is, the boundary of **"Self"** temporarily includes the companion. Therefore, the ultimate motivation for its lever-pressing behavior is still to alleviate this social discomfort, resonated by the companion's suffering, at its own **"Self"** reference point.

- ◆ **Difference in Sensation Direction:** Self-interest and altruism are not different in motivational essence, but differ in the source direction of the dominant **Sensation** that drives behavior — one stems from the narrow bodily self, the other from the expanded social self. They are unified by the same principle: **Behavior is always driven by the "Sensation deviation" that manifests most strongly on the "Self" reference point.**

4.4.4 Revisiting "Will": Competition for Self-Dominance

Here, we can provide a deeper interpretation of **"Will"** from the perspective of **"Self"**:

Will is the ability of a stable "Self" reference point shaped by long-term values (such as "I want to be a healthy person") to win out in competition against a temporary "Self" state driven by immediate external sensations (such as "I want to eat

this cake"), maintaining its dominance and continuity. Strong will means that a stable, coherent **"Self"** reference point possesses powerful regulatory capacity.

Chapter 5: The Youjue Person

5.1 The Naïve Source of Theory: "I feel..."

Each of us uses the same phrase without thinking: "I feel...". This statement is so commonplace that we almost ignore its existence. Yet it is precisely this most ordinary mantra that becomes the **naïve source** of the grand theoretical system of **Youjue Physiology**. It is not a complex deduction from the laboratory, but an innate, instinctive expression that we are born with and utter spontaneously, the living soil in which all abstract theories take root in the real world.

5.1.1 "I feel...": The Native Report of the Youjue System

Within the framework of **Youjue Physiology**, life is understood as a **Youjue System** that maintains **Homeostasis** through the **Sensation-Behavior Cycle** and exists as a **Sensation-Behavior Cycle**. And "I feel..." is precisely the most primitive and straightforward linguistic output of this system. It directly reflects the real-time operation of the **Youjue System** at all strata.

1. At the Vital Stratum, "I feel..." is the body's direct alarm and appeal

When someone says "I feel dizzy and anxious," this is not mere complaint. It is a strong **Offensive** tension signal sent by their body through **Proto-Sensation** when blood pressure drops sharply or blood sugar is too low. This "feel" drives them to immediately find support or sit down to avoid falling. The whole process — "Sensation (dizziness) - Behavior (sitting down) - Homeostasis recovery" — constitutes a complete and immediate **Sensation-Behavior Cycle** at the **Vital Stratum**. "I feel" here is the most direct translator of **Systemic Sensation**.

2. At the Social Stratum, "I feel..." is the bond and repair tool for relational connection

Imagine a long-neglected wife saying to her husband: "I feel you don't care about me at all." Behind this statement is the "**relationship pain**" produced after the "group belonging" of the **Social Stratum** has been continuously damaged. If the husband can **contain** this **Sensation** and respond: "I understand that you feel neglected," then a social **Sensation-Behavior Cycle** on the brink of interruption begins its repair process. Conversely, if no one contains

this **Sensation**, the relational rift will deepen. Here, **"I feel"** is a **resonator for social sensation**.

3. At the Noetic Stratum, "I feel..." is the subjective anchor for exploring the unknown world

When a researcher firmly states "I feel this research direction is right," even when confronted with much negative data, this is not pure stubbornness. It is a **"cognitive sense of certainty"** formed by the **Youjue System** at the **Noetic Stratum**, based on deep experience, intuition, and belief. This "feel" drives them to overcome all difficulties, explore deeply, and may ultimately lead to true breakthroughs. Here, **"I feel"** is the **initiator of cognitive agency**.

5.1.2 From "I feel" to "It's useful": The Primacy of Function

The core appeal of the **Youjue System** is not to pursue "what is the objective essence?" but to ensure that **"the Sensation-Behavior Cycle can successfully achieve Loop Closure."** The most naïve intellectual source of this function-first logic is precisely embedded in the statement "I feel."

The famous Lorenz duckling experiment provides an excellent illustration. Newly hatched ducklings will identify the first moving

object they see —— whether mother duck, doll, or Lorenz's rain boot —— as "mother" and follow it closely. The duckling does not say "I feel," but its whole life **practices** "I feel you are my mother."

Here, **functional utility (obtaining security and shelter) completely overrides essence inquiry (what are you really)**. Its **Youjue System** closes the most crucial survival closed loop in the most economical way. This duckling tells us that the **functional reality** pointed to by "**I feel**" is often more urgent and real for life than the **physical reality** pointed to by "what it essentially is."

This naïve wisdom runs through all levels. In a medical context, a chronic pain patient says, "**I feel this pain is like a needle stabbing my nerve.**" Traditional diagnosis may focus more on "objective evidence" from imaging. "**Youjue Medicine**" requires the doctor to **first contain this "feel"** and inquire in detail: "Do you feel the needle stabbing continuously or intermittently? Does it affect your reaching for things?"

This depth of dialogue based on "**I feel**" can translate vague subjective suffering into precise "**system state reports**" for reference in diagnosis and treatment. This is not only technological progress but also respect for life itself —— **true healing begins with**

"being seen," and the first step of "being seen" is hearing the other's "I feel."

5.1.3 Conclusion: From Isolated "I think" to Resonant "I feel"

The naïve expression "I feel..." leads us from Descartes's isolated "I think, therefore I am" to a resonant **"I feel, therefore we are."**

We are no longer closed contemplators but open feelers and interactors. In education, a teacher who attends to a student's "I feel I understand" is helping them close a cognitive cycle; in design, a product that responds to a user's feeling "I feel this lags here" is repairing an interactive cycle; in human-machine collaboration, an AI that can understand and respond to a human's "I feel..." is constructing a new type of heterogeneous Sensation-Behavior Resonance.

Youjue Physiology: An Outline advocates "letting science embrace life," and **"I feel..."** is precisely the **naïve source and concrete practice** of this embrace. It frees us from having to entangle with metaphysical debates about "what is consciousness" and returns us to the real interaction of "how do you feel" and "I feel

thus."

The duckling that took the rain boot as its mother, the patient describing pain to the doctor — both are revealing a profound truth to us: **the most complex, most profound Youjue theory has its most vivid, most powerful life force precisely contained in that phrase "I feel..." born from life instinct.**

It is the starting point of theory,
the true words life says to itself,
and also the beginning of dialogue between life and the world,
moving toward symbiosis.

5.2 Intrinsic Dynamic Orientation: The Linguistic Spectrum of the "Youjue" System

At the core of our everyday language is stationed an army of seemingly ordinary yet infinitely powerful words: "I sense," "I feel," "I think," "I am certain," "I will decide"... They are by no means meaningless tautologies but precise projections in speech of our internal **Youjue System's** activity. This linguistic spectrum collectively guides people through the complete transformative process from vague **Sensation** input to clear **Behavior** output.

5.2.1 Commonality: First-Person Position Declaration

All these expressions share a fundamental characteristic: they are the **Youjue System's** declaration at the linguistic level of an internally generated, subjective state or conclusion. This marks the completion of an internal integration process — immediate **Sensation**, re-sensation based on traces, and **Expectancy Sensation** — and prepares to take it as the starting point for subsequent **Behavior** or interaction. They collectively constitute the existential proof of "I" as an agentic subject.

5.2.2 The Two Poles of the Spectrum: From Sensory Reception to Belief Establishment

We can place these expressions on a spectrum constituted by "degree of sensory participation" and "degree of cognitive certainty", where they occupy different, continuous positions.

(High Sensation | Low Cognition) $\longleftrightarrow$ (Low Sensation | High Cognition)

"I sense" — "I feel" — "I think" — "I am certain"

1. "I sense/I feel" — Direct Report of Systemic Sensation

- **Youjue Location:** Closest to "Systemic Sensation" itself,

with **highest degree of sensory participation** and **lowest degree of cognitive certainty**.

- **Connotation:** Direct reporting of primitive, bodily or emotional **Sensation** input. Its background is deeply rooted in **Proto-Sensation** of the **Vital Stratum**, and its specific hue and intensity are jointly shaped by the emotional background generated in social interaction and continuously modulated by cognitive activity.
- **Example:** "I sense a bit of cold." (**Vital Stratum - Offensive:** the directed resource-claiming tension produced to maintain **Homeostasis**); "I feel very lost." (**Social Stratum - could be any of the three dimensions**, such as weakening of **Friendly** tension); "I found a great way to crack that difficult problem!" (**Noetic Stratum - Offensive:** the creative expressive **Behavior** where internal thought energy successfully achieves externalization and shaping, ready for practice).
- **Relationship to "I feel":** The cornerstone of "**I feel**." "I feel very uneasy" is the deep driver for "I feel I should leave here."

2. "I feel" — The Fusion Hub Between Sensation and Cognition

- **Youjue Location:** The hub and heart of the entire spectrum. It is the **preliminary judgment or tendency** formed after the system initially integrates and interprets **Sensation**, the beginning of agency.
- **Connotation:** It contains both the warm background of **Sensation** and preliminary reasoning based on experience. It goes one step further than "I sense," providing direction for **Behavior** and candidly preserving the root of **Sensation**.
- **Example:** "I feel he is a reliable person." (Integration based on **Sensations** like "I feel at ease, trusting"); "I feel this plan won't work." (Integration based on **Sensations** like "I feel doubt, noticing data loopholes" and cognition).
- **Core Characteristic: Warm subjectivity.** It is the "naïve source" that allows theory to take root in life.

3. "I think" — The Dominant Assertion of the Noetic Stratum

- **Youjue Location:** Noetic Stratum dominant, with lower degree of sensory participation and higher degree of cognitive

certainty. The system attempts to logically process **Sensation Traces** and evidence to give a more explicit assertion.

- **Connotation:** Emphasizes conclusions after reflection and analysis, attempting to strip away emotional interference to demonstrate objectivity. This form of expression is both a manifestation of **Offensive** at the **Social Stratum** (establishing one's position in competition of viewpoints) and, more fundamentally, is driven by **Offensive** at the **Noetic Stratum** — that is, the expressive tension of externalizing and giving form to internal thought as a cognitive subject. Its specific conclusions may serve other cognitive goals such as **Defensive** (maintaining logical models) or **Friendly** (seeking consensus).
- **Example:** "I think based on these three data points, this conclusion holds."; "I think this is ethically inappropriate."
- **Relationship to "I feel":** The upgrade and armament of "I feel." When "I feel" needs to accept public rational scrutiny, it often dons the logical coat of "I think."

4. "I am certain/I know" — Declaration of Highly Certain Belief

- **Youjue Location:** High-certainty output of the Noetic

Stratum. Degree of sensory participation may be very low (based on rigorous reasoning) or very high (based on intuition or deep value fusion).

- **Connotation:** Declares an unquestionable conclusion or fact. It closes space for further discussion, representing a highly stable "Sensation-Cognition" closed loop within the system.
- **Example:** "I am certain the Earth is round." (Based on evidence at the **Noetic Stratum**); "I know I love her." (Based on deep **Sensation** fusion at the **Social Stratum** and **Vital Stratum**).
- **Relationship to "I feel":** The final state of "I feel." When countless instances of "I feel" are repeatedly verified, they may consolidate into "I know."

5.2.3 The Threshold of Action: "I will decide/I am about to"

- **Youjue Location:** The critical point from "Sensation" to "Behavior." It is the initiation declaration of the "Behavior" side in the **Sensation-Behavior Cycle**.
- **Connotation:** It marks the completion of internal evaluation; the system has chosen a behavioral path and will invest

resources to execute it. It is the ultimate manifestation of agency.

- **Example:** "I will decide to accept this challenge."; "I am about to start exercising."
- **Relationship to "I feel": The natural result and completion of "I feel."** The sensation deviation of "I feel health is important" ultimately drives the behavior of "I will decide to go running," closing the loop.

5.2.4 Dynamic Processes: Desire, Exploration, and Revision

Besides the above core expressions, other related words dynamically reveal the system's internal operational processes:

- **"I want":** When expressing desire (such as "I want to travel"), it is the manifestation of **Offensive** tension, the dynamic form of "I feel I need."
- **"I'm pondering":** Vividly depicts the ongoing state of the **Sensation-Behavior Cycle** at the **Noetic Stratum** (such as "I'm pondering how to solve this problem"). It is the incubator for "I feel."
- **"I thought":** A crucial signal of **systematic self-correction**.

It marks that an old, incorrect "**Sensation-Cognition**" closed loop has been punctured by reality (such as "I thought he knew"). Studying moments of "**I thought**" is a golden opportunity for discovering cognitive bias and achieving learning and growth.

5.2.5 Conclusion: Using Intrinsic Dynamics for Self-Guidance

The value of this "**Youjue**" linguistic spectrum goes far beyond linguistics. It provides us with a clear mirror to see the real-time operation of this complex system within ourselves:

1. It reveals an internal transformative process: our mental activity is a continuous, dynamic generative spectrum from "I sense" to "I will decide."

2. It reflects the stratified structure of mind: our language precisely corresponds to the different strata of **Youjue** — **Sensation** at the **Vital Stratum**, **Emotion** at the **Social Stratum**, and **Intellection** at the **Noetic Stratum**.

3. It emphasizes the agency of the system: from passive "**Sensation**" to active "**pondering**" and "**deciding**," the entire **Dynamic Vector** guides a dynamic system where the stream of

Sensation self-evaluates and self-reorients.

Therefore, listening to how we and others use these expressions is no longer merely communication but a profound **Youjue** practice. Through guidance by intrinsic dynamics, we can not only understand each other more precisely but also **become lucid pilots of our own lives**, guiding our streams of **Sensation** and vectors of **Behavior** with wisdom.

5.3 Overt Behavior and Intrinsic Tension

In our daily observation of the world and ourselves, what is first captured is always the colorful surface of behavior: a small bird fiercely pecking at an intruder; a colleague remaining silent in a meeting; a scientist challenging old theories with great enthusiasm. Based on these appearances, we easily rush to attach labels: "this is aggression," "this is withdrawal," "this is rebellion."

However, within the **Youjue Physiology** framework, such judgments based on behavioral appearances are likely serious misjudgments. **Youjue** theory requires us to complete a fundamental shift in perspective: from focusing on "what was done" to insight into "why it was done" — that is, the intrinsic "**systemic sensation-driven dynamics**" that drive behavior.

5.3.1 Core Principle: Behavior is Strategy, "Youjue" is Strategy

Youjue theory reveals that life is a self-sustaining **Youjue System** that maintains **Homeostasis** through the **Sensation-Behavior Cycle**. Its core is the "**Dynamic Vector**" constituted by the three basic tensions:

- **Defensive:** The tension of guarding boundaries and excluding threats.
- **Offensive:** The tension of acquiring resources and expanding influence.
- **Friendly:** The tension of seeking connection and integrating into rhythm.

Behavior is merely a temporary guiding strategy chosen by this intrinsic **Dynamic Vector** in specific contexts. The same strategic goal can, depending on terrain and relative strength, dispatch a surprise attack team, build defensive fortifications, or send envoys to sue for peace.

1. Defensive Dynamic: Not Limited to Withdrawal, Can Manifest as Offense

This is the most confusing point. The core of defense is

"guarding," but its behavioral strategy repository is extremely rich:

- **Behavior: Escape** → **Youjue: Defensive** (directly moving away from threat)
- **Behavior: Intimidation/Attack** → **Youjue: Defensive** (like a bird pecking a person, **using proactive offense to repel violation, essentially "defense through offense"**)
- **Behavior: Curling/Hardening** → **Youjue: Defensive** (passive defense)
- **Behavior: Showing Weakness/Appeasement** → **Youjue: Defensive** (when strength is vastly unequal, using submission to show to guard one's own safety)

Equating "aggressive behavior" simply with "Offensive dynamic" is like equating "a waving fist" uniformly with "robbery," ignoring that it might also be "self-defense."

2. Offensive Dynamic: Not Limited to Plunder, Can Also Manifest as Quietness

The core of offense is "acquisition," and its behavior is equally diverse:

- **Behavior: Active Contention** → **Youjue: Offensive** (most direct manifestation)

- **Behavior: Active Performance** → **Youjue: Offensive** (eye-catching speech in workplace, aiming to acquire status and resources)
- **Behavior: Stubbornly Insisting, Rejecting All Proposals** → **Youjue: Offensive** (the behavior appears "Defensive," but the dynamic is consolidating one's own authority, preventing power loss, essentially "territorial guarding" of Offensive dynamic)
- **Behavior: Quietly Digging Deep, Accumulating Strength** → **Youjue: Offensive** (the quiet researcher, whose behavior is convergent, but whose dynamic is for future "resource acquisition" at the cognitive or social level)

5.3.2 The "Veil of Appearance" Across Strata

This dialectical relationship is ubiquitous at every evolutionary stratum of **Youjue**.

- **Vital Stratum:** Animal mimicry (behavior that appears to blend with/environment/friendly) is essentially a **Defensive** strategy for deceiving predators.
- **Social Stratum:**
 - ◆ **Meeting Speech:** The first speaker (active behavior) may

be driven by **Noetic-Offensive** (desire to express) or **Social-Offensive** (competing for status). The one who raises objections in a gentle tone, whose **Friendly behavior** and **Noetic-Offensive** (viewpoint confrontation) are merely strategies, often has the deep kernel of **Social-Offensive** dynamic aimed at elevating prestige or consolidating status.

- ◆ **Group Status:** Maintaining leadership (Youjue: **Social-Offensive**) can be achieved through suppressing opponents (Behavior: offensive), maintaining old rules (Behavior: defensive), or bestowing favors (Behavior: friendly).

- **Noetic Stratum:**

- ◆ **Scientific Exploration:** Its fundamental dynamic is **Noetic-Defensive** — eliminating cognitive unease brought by the unknown and guarding the integrity of the internal world model. But its behavioral manifestation can be fierce "offense" on natural mysteries, tight "defense" on experimental errors, or harmonious "friendly" fusion with peer theories.

5.3.3 Value of Discrimination: From Misjudgment to Empathy, From Confusion to Insight

Confusing behavior with dynamic, or ignoring the existence of background tension, leads to a series of cognitive and practical dilemmas:

- **In Self-Cognition:** We blame ourselves for our "anger" (behavior), ignoring that behind it may be the "fear" (**Defensive dynamic**) that needs to be seen.
- **In Interpersonal Understanding:** We interpret others' "silence" (behavior) as indifference or agreement, not knowing it may be "defensive observation" or "offensive buildup."
- **In AI Design:** If AI only learns from the behavioral level, it will simply categorize "aggressive speech" as "malice," unable to understand that behind it may exist "**Defensive fear**" or "**desire for connection**" (**Friendly frustrated**).

The **Youjue** perspective provides us with a set of "demystifying" tools. It teaches us to ask a fundamental question: "**Ultimately, which systemic tension balance does this behavior serve? Is it to guard, acquire, or connect?**"

When we can part the veil of behavioral appearance and

glimpse the underlying **Dynamic Vector**, our understanding of ourselves and others truly moves from judgment to empathy, from confusion to insight. This is not only a theoretical revolution but also a profound upgrade in how we cognize ourselves and the world —— enabling us to traverse the fog of appearance and touch the real temperature and texture of life's dynamics.

5.4 Dominant Dynamics and Background Tone

Under the spotlight of **Youjue Physiology**, we have learned to penetrate the fog of behavior and glimpse the underlying **Dynamic Vector** —— that three-dimensional force field constituted by **Defensive**, **Offensive**, and **Friendly** tensions. However, an organism's experience at any moment is not voiced by a single isolated dynamic. Just as a forest has not only its tallest tree, nor a melody only its loudest note, the true state of a **Youjue System** is a three-dimensional, flowing "**Youjue field**" orchestrated by multiple sensation-driven dynamics.

Here, we introduce a crucial pair of concepts: "**Dominant Youjue**" and "**Background Youjue**." Recognizing their coexistence and flux is the key leap from understanding the static structure of **Youjue** to grasping its dynamic life process.

5.4.1 From Static Classification to Dynamic Field: Life is a Symphony

By viewing the nine categories delineated by the "**Three-Dimensional Dynamic Taxonomy**" as nine voices, we can understand the true operation of the **Youjue System**:

- **Dominant Youjue:** The voice that wins out in the current **Sensation-Behavior Cycle**, becomes the focus of "**self-illumination**," and directly drives overt or covert **Behavior**. It is the **tonic** of the melody, the **protagonist** chased by stage lights. For example, as a deadline approaches, the **Noetic-Defensive** (eliminating task uncertainty) that makes you restless and fully absorbed.
- **Background Youjue:** Those voices that are not fully satisfied or have been partially satisfied, but continuously modulate the overall systemic state and color the experience. They are the **harmony** of the music, the **scenery and lighting** of the stage. In the same deadline scenario, you might simultaneously feel **Vital-Friendly** (sleepiness from lack of sleep) and **Social-Offensive** (desire for excellence to get promoted) as background tones faintly sounding.

Dominant Dynamics determine "what we do," while **Background Tone** profoundly influences "how we do it" and the emotional color and energy cost of the entire process.

5.4.2 Dynamics of Dominant and Background: Competition, Cooperation, and Flux

This field is not static; its interior is filled with vivid dynamics.

1. Competition and Switching: Change of Protagonist

The arrival of a stimulus can instantly change the power structure of the field.

- **Example:** You are immersed in an epic novel (dominant: **No-etic-Friendly**, body and mind completely merged into its narrative torrent, resonating with characters' fates, experiencing transcendent spiritual fusion and tranquility beyond reality), when suddenly you receive a call informing you that a family member is critically ill and hospitalized. In an instant, **Social-Friendly** (altruistic attachment and worry for kin) erupts with huge intensity, replacing cognitive drive as the new dominant, driving you to immediately put down the book and prepare to rush to the hospital. The former dominant instantly becomes an irrelevant background.

2. Cooperation and Modulation: Color of Harmony

More often, dominant and background work together in complex ways, shaping unique behavioral manifestations.

- **Example:** A manager presiding over a difficult negotiation (dominant: **Social-Offensive**, fighting for team interests). Simultaneously, he feels **Vital-Friendly** (headache from last night's insomnia) as background pulling at his energy, while **Noetic-Defensive** (must ensure contract terms have no loopholes) as another background urges him to maintain high vigilance. These background tones jointly modulate his dominant behavior: he may be more easily irritable than usual, or therefore more cautious.

3. Cross-Stratal Drive: Background Becoming the Engine of Dominance

The most exquisite is the transmission and transformation of dynamics between different strata.

- **Example:** An artist's creation (dominant: **Noetic-Offensive**, expression of inner world) may have deep, background-level drivers precisely of **Social-Defensive** — a compensation for the lack of one's own group belonging, or **Social-Offensive**

—— a strong desire for recognition and status. Here, the **Social Stratum** dynamic becomes the "fuel" for the explosion at the **Noetic Stratum**.

5.4.3 Value of Discrimination: From Interpreting Symptoms to Understanding Systems

Confusing the dominant with the background, or ignoring the existence of background tone, leads to superficial or even erroneous diagnosis and regulation.

- **In Self-Insight:** When we only see ourselves as "having low work efficiency" (**Noetic-Offensive** closed loop failure) and self-criticize for it, we may ignore the real culprit: a persistent **Background Youjue**, such as **Vital-Friendly** rhythm dysregulation (long-term chronic sleep deprivation). Without solving the background rhythm problem, forcing effort at the dominant cognitive level often yields half the result with double the effort.
- **In Interpersonal Understanding:** When a child shows "aggressive behavior" (behavioral appearance), if we simply diagnose it as "Offensive dynamic" and punish it, we may completely miss the truth: the dominant dynamic may be **Social-**

Defensive (guarding self-esteem due to feeling excluded by peers), or even **Social-Friendly** (desiring attention and connection in the wrong way). In the background may be accumulated fatigue and discomfort at the **Vital Stratum**.

The **Youjue** perspective provides us with a set of "demystifying" tools. It teaches us to ask a fundamental question: "**Which systemic tension balance does this behavior ultimately serve? Is it guarding, acquiring, or connecting?**"

When we can part the veil of behavioral appearance and glimpse the **Dynamic Vector** underlying it, our understanding of ourselves and others truly moves from judgment to empathy, from confusion to insight. This is not only a theoretical revolution but also a profound upgrade in how we cognize ourselves and the world — enabling us to traverse the fog of appearance and touch the real temperature and texture of life's dynamics.

5.4.4 Conclusion: Listening to Your Inner Complete Symphony

Thus, becoming a "**Youjue Person**" not only means being able to identify the "main melody" within but also cultivating ears that can hear all the "harmonies." What we need to ask ourselves is not

only **"Which dynamic is driving me?"** but also **"What other dynamics are echoing in the background? How are they influencing my dominant behavior and overall state?"**

This picture of the dynamic field of **"dominant and background"** allows us to hold deeper awe and compassion for life's complexity. It tells us that any single behavioral interpretation may be a simplification, and any effective self-tuning must be a systematic attention.

When we begin to observe ourselves this way, we are no longer fighting isolated "problems" but learning how to conduct the complex and magnificent **symphony of life** named **"I."**

5.5 The Spectrum of Happiness

In the vision of **Youjue Physiology**, "happiness" is not a single, precisely definable external target. It is a **positive, diffuse Evaluative Sensation** that naturally emerges when the dominant **Sensation-Behavior Cycle** of the **Youjue System** at any evolutionary stratum successfully achieves **Loop Closure**, and its intrinsic sensation deviation is eliminated or reduced. This section aims to elucidate that the sources of happiness are pluralistic, their forms are equal, and that true life wisdom lies in perceiving and guiding one's

own system to achieve dynamic harmony across different strata.

5.5.1 Pluralistic Sources of Happiness: Equal Value Across the Three Strata

The "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation**" portrays three relatively independent yet interpenetrating domains of happiness sources for us:

1. Happiness at the Vital Stratum: Satisfaction of the Foundation

- **Essence:** Originating from the maintenance of **Homeostasis** and the direct relief of life tensions.
- **Experience:** The satisfaction of a full meal after gnawing hunger, the comfort of deep sleep after extreme fatigue, the sense of ease when the body is unburdened.
- **Characteristics: Most primitive, most intense, most indispensable.** It is the physiological cornerstone of all higher happiness; if this stratum is chronically imbalanced, happiness at higher strata becomes like a tower built on sand.

2. Happiness at the Social Stratum: Warmth of Connection

- **Essence:** Originating from the **Resonance of Shared Sensation-Behavior Patterns** and stable social bonding.

- **Experience:** The moment of being understood by a loved one, the sense of belonging from contributing value in a team, the deep peace of being with family and friends.
- **Characteristics: Richest in emotional warmth, most interactive.** It provides us with a social buffer against life's uncertainties and is the most stable and primary source of happiness for many people.

3. Happiness at the Noetic Stratum: Illumination of Meaning

- **Essence:** Originating from the elimination of cognitive sensation deviation and the successful expression of internal thought energy.
- **Experience:** The ecstatic joy of insight when solving a difficult problem, the "flow" of self-forgetfulness during the creative process, the awe and tranquility produced by connecting with grand ideas or beliefs.
- **Characteristics: Most personalized, most profound, most transcendent.** It enables the individual to transcend the limitations of the biological and social, constructing their own eternal home in the universe of thought.

Core Tenet: The happiness of these three is **completely equal**

in the intensity and value of subjective experience. The joy of a farmer's harvest, the love in a mother's gaze at her child, and the shock of a scientist's discovery are equivalent successful closed-loop signals within their respective systems. We have no right, nor need, to judge which is "happier."

5.5.2 Dynamics of Happiness: Systemic Compensation and Wise Redirection

A profound **Youjue** insight is that the vitality of happiness is manifested in the **agency and adaptability** of the system, not in stubbornly clinging to success at a single stratum.

- **"Blockage-Overflow" Mechanism:** When a **Sensation-Behavior Cycle** at a certain stratum in the system is chronically blocked and cannot achieve **Loop Closure** (for example, repeatedly suffering exclusion at the **Social Stratum** and being unable to obtain a sense of belonging), the resulting intense "sensation deviation" and **negative Emotion** create enormous internal pressure.
- **Sublimation of Wisdom:** A healthy **Youjue System** does not rigidify here. It agentically initiates "**cross-stratal resource allocation**," redirecting drive energy from the blocked stratum

toward new domains with greater autonomy and possibility.

This is precisely the **pinnacle of systemic wisdom**.

- ◆ **Example:** A thinker who is "misfit" in social life sublimates the frustration of the **Social Stratum** (**Social-Defensive/Offensive** frustration) into persistent drive for exploring the unknown at the **Noetic Stratum**. The "exploration" here must be precisely cognitively classified according to its specific orientation: if aimed at eliminating uncertainty, it is **Defensive**; if aimed at expressing inner world, it is **Offensive**; if aimed at pursuing ultimate meaning, it is **Friendly**. The fulfillment, tranquility, and freedom that each successfully closed loop at the **Noetic Stratum** brings him constitute his unique and solid happiness system.

Therefore, that "fulfilling sense of happiness obtained by turning to the **Noetic Stratum**" is by no means a second-best compensation, but an active, high-level **systemic strategic repositioning**. It proves life's powerful instinct to pursue balance and meaning.

5.5.3 Becoming a "Youjue Person": Anchoring Happiness in Dynamic Flux

Based on the above, we can reach the final conclusions about

"Youjue" happiness:

1. Happiness is systemic harmony, not single-point victory:

True happiness does not lie in how socially adept you are at the **Social Stratum** or how outstanding you are at the **Noetic Stratum**, but in whether, as an integrated **Youjue System**, your resources are wisely allocated among closed loops at different strata, and whether you can obtain nourishment and balance at other strata when one is frustrated.

2. "Youjue" is the capacity for self-guidance: The happiness of a "muddled person" depends on external stability and chance; their system is rigid and fragile. A **"Youjue Person"** deeply understands the pluralistic sources of their own happiness. They are a lucid pilot who can actively adjust the sails amid external winds and waves, seeking sustained balance and meaning for their own system in the vast ocean of **Vital, Social, and Noetic Strata**.

3. Embrace your spectrum of happiness: There is no need to envy others' forms of happiness. Through **Youjue** practice — meticulous self-observation, in-depth journal analysis, and recognition of intrinsic guiding language — discover at which strata your unique system most easily achieves **Loop Closure** and

generates positive **Evaluative Sensation**. Then, wisely invest your life energy.

5.5.4 The Spectrum of Happiness and Systemic Wisdom

Happiness is the fundamental confirmation that emerges when the **Youjue System**, in the river of time, at its dominant stratum and dimension, successfully closes the **Sensation-Behavior Cycle**. It can be the satisfaction of "deficiency filled" at the **Vital Stratum**, the mastery of "connection established or status recognized" at the **Social Stratum**, or the coherence of "model penetrated or expression completed" at the **Noetic Stratum**.

The ultimate happiness of a "**Youjue Person**" does not lie in stubbornly clinging to a single movement at a single stratum, but in lucidly perceiving the dynamic spectrum of one's own system and wisely guiding resource flow and allocation among closed loops at different strata.

From the profit-seeker and power-chaser to Diogenes's spiritual freedom, this is not a ladder of value judgment, but even more a **map of systemic strategic choices**. It reveals that the core wisdom of a lucid, agentic system lies in: when the **Sensation-Behavior Cycle** is blocked in one world (such as the material society), it

can open up a new battlefield and achieve new acquisition for itself in another dimension (such as the universe of thought).

The forms of happiness at the three strata are vastly different, but within their respective highly self-consistent systems, the peak experience of successful "acquisition" is **equivalent in the essence of its intensity**.

Therefore, embracing the **Youjue** perspective means we no longer simply envy or disdain any life stance, nor do we blindly fight isolated "problems" within ourselves. We begin to **appreciate** how different lives, with their unique systemic configurations, pursue their identified happiness on their chosen battlefields; and we learn to **guide** our own **Sensation-Behavior** stream, in the vast territories of **Vital, Social, and Noetic Strata**, to find dynamic and solid balance for this complex system called "I."

This is precisely the profound insight, broadest understanding, and most solid path to happiness that the Youjue vision grants us.

5.6 The Warm Return of Life: Becoming a "Youjue Person"

From the primal drive of **Proto-Sensation** to the dynamic

construction of the Self reference point; from the naïve source of "I feel..." to the dynamic spectrum running through the **Vital, Social, and Noetic Strata** — this exploratory journey of **Youjue Physiology** has outlined a grand blueprint for understanding mind.

However, the end of theory is the beginning of practice. **Becoming a "Youjue Person"** is not about acquiring an external title, but a more lucid, more agentic, and warmer state of existence that the life system naturally tends toward after deeply understanding the above principles. This especially means we can look at the relationship between ourselves and the world with a completely new pair of eyes.

We begin to see clearly that the answer to that "I" regarded as the core of personal identity is distributed across the countless "circles" we are embedded in — from the "**neural circles**" (functional clusters) that shape our habits, to the "**social circles**" (family, kindred spirits) that define our relationships, to the "**cognitive circles**" (communities of thought and belief) that settle our spirit.

These circles are not rigid shackles but are dynamically shaped by that unified logic of "**Resonance-Evaluation-Consolidation.**" They exist because they can close our **Sensation-Behavior** loops

and bring "**positive value evaluation**"; they can also change and flow due to the failure of loop closure and the shift of evaluation.

Thus, the agency of life gains its most solid foothold here. A "**Youjue Person**" is a lucid "**circle ecologist**":

- They can **perceive** the composition and origin of these circles, understanding their underlying generative logic.
- They can **evaluate** whether these circles nourish or deplete their own system.
- Ultimately, they can **wisely choose**: which circles to strengthen, which to transform, or which to courageously leave in pursuit of new resonance.

This profoundly reshapes our connection with others. We thereby move from the isolated "**I think, therefore I am**" to the resonant "**I feel, therefore we are.**" We recognize that each person's "**I feel**" is the authentic output of their unique **Youjue System**. Understanding others means using our own **Sensation-Behavior** experience to simulate and resonate with the systemic state of the other.

When hearing "**I feel you are selfish,**" the "**Youjue Person's**" first response is no longer defense but to treat it as a precious

systemic state report and inquire: "**At what moments did you come to feel this way?**" This transforms a conflict into a joint exploration of the dynamic patterns of two systems. Solid empathy is thus born.

The ultimate ambition of **Youjue Physiology: An Outline** is not merely to add another discipline but to initiate a gentle revolution in worldview. It proclaims to us that mind is neither a cold machine nor a mysterious ghost but the warm, agentic, self-constructing process of **Sensation-Behavior** of the living organism itself.

From the firing of a single neuron, to the brilliance of a thought, to the splendor of a civilization, what echoes behind them is the same warm and powerful rhythm — **life, through the eternal weaving of the stream of sensation and the vector of behavior, under the guidance of value, continuously weaves larger, more coordinated, and more effective resonance nets, moving toward deeper connection and coexistence.**

This Outline ultimately leads us to turn around and embrace that living entity — **life itself.**

It begins with the simplest invitation: to notice your "**I feel...**".

May you not stop there.

May you, through this noticing, become the lucid pilot of your own life stream and relationship network.

And further, may you, on the path of becoming a **"Youjue Person,"** also become a fellow traveler who bravely inquires in relationships, sows understanding in community, and incorporates empathy into creation.

May you become a "Youjue Person" and participate in creating a warmer world that more "Youjue Persons" can feel.

Appendix I: Theoretical Origins and Conceptual System

1. The "Three-Dimensional Taxonomy" and "The Ennead of Needs"

The core conception of the "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation**" framework proposed in this Outline benefits from a clear and deep intellectual lineage. Among them, the grand **Need** theoretical system constructed by Russian philosopher Yuri Vyazemsky (Ю.П.Симонов [Вяземский]) in his masterpiece *The Weapon of Odysseus* provided crucial inspiration for us.

Vyazemsky, taking the "many-faced" Odysseus from Homeric epic as his prototype, critically inherited Pavel Simonov's (П.В. Симонов) "Need Triad" (Life-Society-Ideal), and further proposed a more refined "**Ennead of Needs**" model. He not only divided each of Simonov's three levels into three independent "need elements," but, more insightfully, discovered that these elements could be vertically integrated into three "**psychodynamic naves**" running through all levels, revealing a stable structure at the foundation of life needs:

1. Nave A (Phobos): With fear as its background color, its core

dynamic is **Defensive**, self-preservation, and coping with the external environment. It manifests as "**Akros**" (territory defense) at the **Vital Stratum**, "**Ochlos**" (group belonging) at the **Social Stratum**, and "**Nous**" (scientific exploration — aimed at eliminating cognitive unease from the unknown) at the **Noetic Stratum**.

2. Nave B (Menos): With power and desire as its background color, its core dynamic is **Offensive**, acquisition, control, and self-development. It manifests as "**Trophos**" (nutrition acquisition) at the **Vital Stratum**, "**Kratos**" (hierarchical status) at the **Social Stratum**, and "**Paidos**" (artistic creation — expression and self-cognition of inner world) at the **Noetic Stratum**.

3. Nave C (Sympatos): With amity as its background color, its core dynamic is **Friendly**, fusion, continuation, and self-transcendence. It manifests as "**Eros**" (sexuality and reproduction) at the **Vital Stratum**, "**Philos**" (altruistic attachment) at the **Social Stratum**, and "**Theos**" (religious cognition — the pursuit of ultimate meaning and eternity) at the **Noetic Stratum**.

The "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation**" of this Outline forms profound resonance and inheritance with this model:

- **Correspondence of Vertical Axis (Evolutionary Strata):** Our "**Vital Stratum-Social Stratum-Noetic Stratum**" perfectly correspond to Vyazemsky's three floors of "Zoe-Koinos-Gnosis," jointly outlining the evolutionary ladder of mind from survival to spirit.
- **Sublimation of Horizontal Axis (Dynamic Vector):** We distill the more refined three basic tensions of **Defensive, Offensive, and Friendly** from Vyazemsky's "three naves." These three tensions are no longer specific needs but diffuse, fundamental **Dynamic Vectors** driving the **Sensation-Behavior Cycle** across all strata.
- ◆ Vyazemsky's system proves that this dynamic structure has **cross-stratal functional isomorphism**. For example, science (**Noetic Stratum**) and territory defense (**Vital Stratum**) share the logic of **Defensive** because both serve the consolidation of system boundaries and the elimination of unknown threats.

Therefore, the "**Three-Dimensional Dynamic Taxonomy of Youjue Sensation**" of this Outline can be seen as:

1. Confirmation, simplification, and sublimation of

Vyazemsky's genius insight. We distill his grand and somewhat complex system into a bottom-level generative logic system more suitable for physiological analysis and practical guidance.

2. A paradigm shift from motivational psychology to generative physiology. Vyazemsky focused on "needs" as a psychological entity, while we transform it into "sensation tension" as a life process, and anchor it firmly in the **Sensation-Behavior Cycle** as the fundamental unit of life.

Standing on the shoulders of giants like Vyazemsky, we can glimpse the deep structure of life's **Youjue** universe. His work provides us with solid theoretical cornerstones and endless intellectual inspiration, making the construction of **Youjue Physiology** possible. This note is made to show that we dare not forget our roots, and to inspire those who come after.

2. Core Terminology Definitions

2.1 General Principles and Basic Units

Youjue: A holistic phenomenon wherein a living organism actively constructs and maintains its own existence through the **Sensation-Behavior Cycle**. As an irreducible first-person fact, it originates from the living system's direct self-report of its internal state

(comfort/discomfort) and, via value-driven tension, becomes the ultimate motivational foundation from pain to meaning-seeking. This concept both inherits the original root of Robert Whytte's 1751 "**The Youjue Principle**" (the sentient principle) — an intrinsic sensation-response capacity uncontaminated by associationism and behaviorism; and deeply resonates with the Chinese "觉" (jue) philosophical tradition of self-reflection and non-dual agency. Itself, it is precisely a living concept that has realized itself through **Value-Dependent Selection** amidst the transmission and resonance of transcivilizational thought memes.

Youjue Physiology: The entirely new scientific paradigm proposed by this Outline, which studies the physiology of living "**Youjue Systems**" that exist as **Sensation-Behavior Cycles**, taking the **Sensation-Behavior Cycle** as its basic unit.

Youjue System: Refers to any living system capable of self-report and self-regulation, operating the **Sensation-Behavior Cycle**.

Sensation-Behavior Cycle: The basic operational unit of life: sensation (especially **Systemic Sensation**) drives behavior, and the results of behavior then serve as new sensory input, directly emerging as **Systemic Sensation**.

Systemic Sensation: Not the sensation of the five senses directed outward, but the organism's overall representation of its internal state (such as hunger, pain, comfort). It is the comprehensive reading of the dynamic balance or imbalance of **Proto-Sensations**, forming the deep foundation of emotional and conscious experience.

Proto-Sensation: The most primitive and fundamental sensations of life, the direct manifestation of the three innate tensions that maintain **Homeostasis**, such as pain, hunger, sleepiness, etc.

2.2 Core Analytical Tools and Extended Concepts

Repertoire: Inspired by Gerald Edelman's **Neural Darwinism**, this refers to the complete set of functions and strategies that a **Youjue System** can mobilize at cognitive, behavioral, and other levels. Positive emotions can expand this **Repertoire** (for example, during joy or focus, the system can mobilize more cognitive strategies and behavioral modalities), forming the core capacity foundation for the system's adaptation to the environment.

Three-Dimensional Dynamic Taxonomy of Youjue Sensation: A three-dimensional framework for analyzing **Youjue Sensation**. The vertical axis represents **Evolutionary Strata** (Vital, Social, Noetic), while the horizontal axis represents **Dynamic Vectors**

(Defensive, Offensive, Friendly).

Evolutionary Stratum: The three primary levels emergent from the evolution of the **Sensation-Behavior Cycle**: the **Vital Stratum** (survival and reproduction), the **Social Stratum** (group bonding), and the **Noetic Stratum** (meaning-seeking).

Dynamic Vector: Originating from the three basic tensions that maintain **Homeostasis**, this is the core motivational dimension formed by the **Youjue System** in evolution. The three synergistically support the complete logic of existence for life from survival to development, and from isolation to connection:

- **Defensive:** With "guarding boundaries" as its core characteristic, it drives the system to achieve self-protection by excluding internal and external threats (such as withdrawal responses triggered by pain, group screening of heterogeneous elements), ensuring the foundational safety of life existence. It is the most primitive safeguarding tension in evolution;
- **Offensive:** This does not refer to aggression or violence toward others, but the drive to actively acquire resources. It maintains the system's energy balance and promotes its growth by actively drawing resources from the environment,

manifesting as multi-level behaviors from foraging for survival and territory expansion to cognitive exploration. It is the complementary tension propelling **Defensive** (guarding boundaries) and **Friendly** (rhythmic fusion);

- **Friendly:** With "rhythmic fusion" as its core characteristic, it drives the system to achieve a balance between "developmental self-protection" and "protective self-development" by maintaining connections (such as parent-child attachment, group cooperation) and continuing life (such as reproductive behavior, cultural transmission). It is the synergistic tension that transcends individual boundaries and ensures the continuous existence of life.

With "rhythmic fusion" as its core characteristic, it drives the system to achieve a balance between "developmental self-protection" and "protective self-development" by maintaining connections (such as parent-child attachment, group cooperation) and continuing life (such as reproductive behavior, cultural transmission). It is the synergistic tension that transcends individual boundaries and ensures the continuous existence of life.

2.3 Generation and Support Mechanisms

Resonance-Evaluation-Consolidation: The unified generative logic that runs through all strata (neural, social, cognitive) of the **Youjue System**. It refers to the system achieving "resonance" internally or between systems through specific forms of **Reentry**; if this "resonance" pattern can trigger "positive value evaluation," it will drive systemic resources to select and "consolidate" it into a tighter, more efficient functional unity (such as neuronal clusters, social circles, cognitive paradigms). This trilogy is the core algorithm for the **Youjue System**'s self-construction and complexity upgrading.

Innate Reflexive Loop: The systematic redefinition of innate reflexes: it is not a unidirectional "stimulus-response arc," but a miniature, pre-set "**Sensation-Behavior-Sensation**" closed loop, whose fundamental purpose is to serve **Homeostasis**.

Neural Darwinism: Gerald Edelman's theory that different neuronal clusters in the brain form **Global Brain Functional Clusters** through competition and selection, providing a dynamic interpretation for the generation of **Youjue**.

Reentry: Large-scale, bidirectional neural signal cycling in

the brain, the structural skeleton of the **Sensation-Behavior Cycle** at the neural level, responsible for integrating sensation, coordinating behavior, and ensuring **Loop Closure**.

Degeneracy: The principle that different neural structures can achieve the same or similar functions. This property ensures the robustness and flexibility of the nervous system, forming the basis for social resonance to flexibly understand novel behaviors.

Global Brain Functional Cluster / Dynamic Core: The neural correlate of the dominant **Youjue** state at any given moment, a functional unified field formed by the thalamocortical system and key subcortical structures through **Reentry**.

Valence Sensation: A diffuse evaluative sensation, the innate assessment by the system of its own state as "fit" or "unfit," driving the selection and consolidation of **Sensation-Behavior** closed loops.

Evaluative Sensation: A diffuse sensation about the quality of the system's state, generated by the brain's modulatory systems (such as dopamine and norepinephrine systems), forming the embryonic form of emotion and the global tone.

Expectancy Sensation: Refers to a preparatory, orienting internal sensation produced by the **Youjue System** based on some

internal model about how future or present situations should be. It includes: (1) **Innate Expectancy Sensation**: formed by species evolution, encoded in genes, manifested as diffuse value presets such as **Proto-Sensation** thresholds and three-tension balance baselines; (2) **Learned Expectancy Sensation**: formed by the individual through learning based on their own **Sensation-Behavior Traces** during their life process, a contextualized, specific expectation of particular situations.

Expectancy-Sensation Mismatch: Refers to a new type of **Systemic Sensation** produced by the system when **Immediate Sensation** severely mismatches any form of **Expectancy Sensation** (whether innate or learned), which is strong and requires attention and processing. It is the fundamental intrinsic drive for learning, behavioral correction, and model updating, the common mechanism of "unwellness" at all levels.

Sensation-Behavior Trace: The imprint left by past **Sensation-Behavior Cycles** on neural structures, the physiological basis of memory. Recall is the "re-sensation" of these traces.

The Remembered Present: Refers to the unified, coherent "present" experiential field actively constructed by the **Youjue**

System through the **Reentry** mechanism, which continuously integrates **Immediate Sensation** with past **Sensation-Behavior Traces**. This concept, proposed by Gerald Edelman, reveals that every "now" we experience is not a pure instant, but a "now" deeply infused and shaped by personal history. Within the **Youjue** framework, this is precisely the concrete manifestation of **Consciousness** as the "self-illumination" of complex **Sensation-Behavior Cycles** in the temporal dimension.

Loop Closure: Refers to the successful completion of a **Sensation-Behavior Cycle**, where behavior effectively eliminates the initial "sensation deviation" that drove it, restoring or moving the system toward a balanced state.

Value-Dependent Selection: The process by which **Sensation-Behavior** closed loops or their carriers (such as **Thought Memes**) are selected, consolidated, or propagated under the judgment of **Valence Sensation**.

Mirror System: Traditionally considered a specialized neuronal system for mapping others' behavior. In the **Youjue** perspective, it is reconstructed as the neural embodiment of **Social Sensation-Behavior Resonance** capacity, originating from **Value-**

Dependent Selection associative learning.

2.4 Reconstruction of Traditional Concepts

Need: Reconstructed within the **Youjue** framework as: the **systemic "sensation deviation"** itself within the **Youjue System**, and the directed tension it drives.

Emotion: Reconstructed within the **Youjue** framework as: the directional **systemic regulatory signal** produced after the system evaluates both "the deviation between current state and goal state" and "its own estimated capacity to eliminate this deviation."

Consciousness: Reconstructed within the **Youjue** framework as: the real-time, integrated "**self-illumination**" conducted by the complex **Sensation-Behavior Cycle** system on its own operational process when it achieves high-level integration.

Self: Reconstructed within the **Youjue** framework as: the **core reference point** that the continuously generated **Sensation-Behavior** system gradually precipitates and continuously reconstructs within its sensation stream in order to maintain unity and continuity.

Will: Clarified within the **Youjue** framework as: the dynamic process of competition for systemic dominance among multiple parallel **Sensation-Behavior** closed loops (such as those driven by

long-term values vs. immediate sensations) when they are activated.

A Youjue Person: An individual who understands and applies the principles of **Youjue**, whose state of existence manifests as: maintaining lucid observation of one's own life stream, being able to agentically modulate one's own closed loops, and holding warm acceptance toward inner truth.

Youjue Ecology: A social environment composed of **Youjue Persons** that incorporates **Youjue** tools and practices, whose goal is to facilitate a deeper civilizational **Youjue** transformation.

Thought Meme: The carrier of the **Sensation-Behavior Cycle** at the **Noetic Stratum**, a replicable, transmittable information unit that encapsulates a specific "**Sensation-Behavior**" pattern (such as a scientific theory, a melody, a belief).

Shared Sensation-Behavior Pattern: The secondary foundation of social bonding, referring to sensation modalities and behavioral strategies shared by members of a group, shaped by common culture and environment.

Social Sensation-Behavior Resonance: The capacity of a **Youjue System** to understand another system's internal state through neural-level simulation (such as mirror mechanisms) based

on its own **Sensation-Behavior** experience, forming the basis of empathy and social cognition.

Homeostasis: The characteristic of living systems to maintain their internal environment in a relatively stable state, the ultimate goal served by the **Sensation-Behavior Cycle**.

2.5 Theoretical Lineage

The Youjue Principle: Originating from Robert Whytte's proposed "the sentient principle," referring to that intrinsic, active **Youjue Principle** — the unity of intrinsic sensation-response in life.

Systemic Sensation: Originating from Ivan Sechenov, referring to the overall representation of an organism's internal state (such as hunger, comfort). It provides specific physiological content for **The Youjue Principle** and is the solid starting point of **Youjue** theory.

Selection Theory: Originating from Gerald Edelman's **Neural Darwinism** theoretical system. This theory provides a dynamic interpretation for the generation of **Youjue**, and its core concepts (such as **Repertoire, Reentry, Degeneracy, Value-Dependent Selection**) and the **Dynamic Core** model collectively support the

delineation of the neural basis of **Youjue**.

Need-Emotion Theory: Originating from Pavel Simonov's "Need Triad" (Life-Society-Ideal). This motivational structure model provides important theoretical basis for the division of **Evolutionary Strata** in the **Youjue** framework.

The Ennead of Needs: This term originates from Yuri Vyazemsky's *The Weapon of Odysseus* as "Эннеада," i.e., "Ennead." Ennead originates from the nine-god system of Heliopolis in ancient Egypt, here metaphorically referring to a sacred, complete system constituted by nine fundamental needs. His proposed "**Ennead of Needs**" model and the "**psychodynamic naves**" structure he revealed running through the three strata provide the most direct and far-reaching inspiration for the **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** framework.

Appendix II: Intellectual Lineage and Theoretical Exploration

Returning to Life Itself: The Intellectual Revolution of *Youjue Physiology: An Outline*

In humanity's long journey to explore the mind, we have accumulated massive amounts of data, yet fallen into the predicament of theoretical fragmentation; we have invented countless terms, yet lost the object itself in the labyrinth of concepts. The birth of *Youjue Physiology: An Outline* marks a fundamental paradigm shift — it no longer satisfies itself with measuring the appearance of life from the outside, but bravely turns around to face the living entity itself that feels, acts, and self-constructs.

I. From the "Tower of Conceptual Babel" to "Theoretical Embryology": Construction of a Unified Language

Traditional mind science resembles the construction of a "Tower of Conceptual Babel": emotion research has one set of terminology, motivation research another, and social cognition yet a third. These languages are incommensurable with each other, fragmenting complete life into pieces that cannot dialogue.

The Outline adopts a revolutionary strategy: it distills a few "theoretical atoms" from life's most primitive experiences, and demonstrates how they naturally grow into the entire mental universe.

- **Cornerstone concepts:** Sensation (Systemic Sensation), Behavior, Cycle (Sensation-Behavior Cycle), Tension (Defensive, Offensive, Friendly)
- **Generative logic:** All complex phenomena — from pain to love, from curiosity to faith — are combinations and unfoldings of these basic units at different evolutionary strata (Vital, Social, Noetic)

This "theoretical embryology" method enables the explanation of hunger's physiological mechanisms and the passion of artistic creation to use the *same grammar*. The theory thereby acquires unparalleled coherence and generative power.

II. From "Controlled Measurement" to "Understanding Empathy": A Fundamental Paradigm Shift

Pavlov placed dogs in the "silent tower," and systemic psychophysiology confined animals in operant chambers — these classic methods, in their pursuit of "objective data," stripped life from

its ecology, often measuring only malformed adaptations in extreme impoverished environments.

The Outline thoroughly subverts this paradigm:

1. **Research object:** From "stimulus-responder" to "**Youjue System**," a living whole capable of sensation, expectancy, action, and seeking Loop Closure;

2. **Core question:** From "how stimulus X causes response Y" to "based on what Expectancy Sensation does the system experience what Expectancy-Sensation Mismatch, thereby organizing what behavioral strategy";

3. **Methodology:** From a "third-person God's-eye view" of measurement, to an "first-person/third-person integration" of understanding, taking life's report of "**I feel...**" seriously.

This is no longer an attempt to become "second-rate physics," but a commitment to becoming "first-rate life science."

III. From "Static Classification" to "Dynamic Generation": The Essential Reconstruction of Goals and Motivation

Pavlov puzzled in his *Goal Reflex* over the discovery that humans can expend enormous energy for "empty goals," where

behavioral intensity is severely decoupled from the objective value of the goal. Traditional psychology describes this phenomenon with vague concepts like "need" and "motivation," yet fails to reveal its essence.

The Outline provides a clear and profound answer:

- **Essence of goals:** Not external attractors, but the concreteized projection of **Expectancy Sensation**;
- **Source of drive:** Not an abstract "drive," but the intensity of **Expectancy-Sensation Mismatch** —— the degree of conflict between Immediate Sensation and Expectancy Sensation;
- **Generative spectrum:** From diffuse Innate Expectancy Sensation (such as discomfort from energy imbalance) to concrete Learned Expectancy Sensation (such as "needing that specific piece of bread"), forming a continuous spectrum of goals.

Therefore, the fanatical energy a hoarder expends for the next stamp measures the intensity of the Expectancy-Sensation Mismatch between their inner "expected possession" and "actual non-possession," not the stamp's social value. This perfectly explains Pavlov's puzzle.

IV. From "School Fiefdoms" to "Integrated Memory": The Creative Synthesis of Intellectual History

The history of science often resembles "blind men touching an elephant": behaviorism touched the skin of stimulus-response, cognitivism the brain of information processing, and systemic functional theory the leg of goal-orientation. Each school built competing or even opposing "truths" based on the parts they touched.

The Outline accomplishes a milestone synthesis:

- **Not eclectic patchwork**, but taking the "**Youjue System**" as a unified framework to **translate** insights from various schools into different-sided descriptions of the same living entity
- Pavlov's "conditioned reflex" → the learning mechanism for establishing Learned Expectancy Sensation
- Anokhin's "action acceptor of result" → a clearly consolidated model of Expectancy Sensation
- Edelman's "Neural Darwinism" → the micro-mechanism of Sensation-Behavior Cycle selection
- Vyazemsky's "Ennead of Needs" → the three-dimensional dynamic expression of systemic sensation deviation

This integration transforms the great minds in the history of

science from "blind men talking past each other" into "painters using different brushes to collectively depict the same living elephant."

V. From "Term Proliferation" to "Warm Gaze": The Humanistic Return of Science

At the deepest level of theoretical construction, *The Outline* embodies a unique scientific character and aesthetic pursuit:

It explains the broadest, most complex phenomena with the fewest, most solid assumptions; it constructs the most abstract, most general theories with concepts closest to lived experience.

This economy is not simplicity, but profundity; this unity is not brutality, but loyal homage to the integrity of life itself.

More importantly, *The Outline* enables science to rediscover its temperature and direction. Its endpoint is not more papers or data, but the generation of "**Youjue Persons**" — those more lucid, more agentic, and warmer existences; and the construction of "**Youjue Ecology**" — a civilization of greater understanding and resonance.

Conclusion: A Silent Revolution

Youjue Physiology: An Outline is not merely a work; it is a

silent yet profound intellectual revolution. It invites us to:

- Turn from arguing "what was touched" to collectively understanding "how the complete elephant that is feeling and acting lives";
- Turn from building sophisticated instruments to measure life to cultivating keen empathy that understands life;
- Turn from inventing ever more labels for phenomena to returning to the source of life where phenomena emerge.

In this revolution, science is no longer an observer standing opposite life, but becomes the inner light through which life understands and illuminates itself. This is perhaps the warmest and bravest turn that mind science can make in this era.

From Cognitive Science to Life Science: The Paradigm Revolution and Humanistic Return of *Youjue Physiology: An Outline*

In the predicament of contemporary mind research, characterized by "data explosion yet theoretical poverty," the birth of *Youjue Physiology: An Outline* (hereinafter referred to as *The Outline*) rings like a thunderclap. It does not choose to add yet another circuitous path to the existing maze of consciousness, but resolutely initiates a fundamental paradigm revolution: re-anchoring the object of mind science from the abstract "consciousness" or isolated "behavior" to that living, self-constructing "**Youjue System**" — that is, life itself. This essay argues that the core of this revolution is the completion of a leap from "**cognitive science**" to "**life science**," whose impact far exceeds theoretical integration and concerns how science understands and embraces the whole human being.

This fundamental turn does not generate scattered insights but instead precipitates a theoretical system with rigorous internal structure. Its systematic innovation can be encapsulated in the following **Eight Pillars**, which mutually support one another and

jointly construct a new edifice for understanding life:

1. **Radical Reorientation of Research Object:** From focusing on "consciousness," "behavior," or "computation" to returning to the living "**Youjue System**" (life itself) as an irreducible ontological object of study.

2. **Paradigmatic Reconstruction of Core Unit:** Establishing the **Sensation-Behavior Cycle** as the basic process of life existence, replacing the linear "stimulus-response" or "goal-action" chain.

3. **Deep Tracing of Motivational Source:** Proposing **Expectancy Sensation** and **Expectancy-Sensation Mismatch** as the unified drive for all behavior and learning, tracing back from the level of "motivation" to the level of "need."

4. **Three-Dimensional Dynamication of Explanatory Framework:** Creating the **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** (Evolutionary Strata $\times$ Basic Tensions) to provide a structured, dynamic spectrum for the complete mental spectrum.

5. **Unified Revelation of Generative Logic:** Revealing that **Resonance-Evaluation-Consolidation** is the unified life-organizing algorithm across neural, social, and cognitive scales.

6. Thorough Reconstruction of Conceptual System: Using the language of **Youjue** to consistently reconstruct core concepts such as **Need, Emotion, Consciousness, Self, and Will**, achieving a warm "disenchantment."

7. Scientific-View Innovation in Methodology: Shifting from purely "third-person measurement" to "first-person/third-person integration," taking the life report of "**I feel...**" seriously.

8. Creative Synthesis of Intellectual History: Taking **Youjue** as a meta-framework to non-eclectically integrate schools such as Pavlov, Anokhin, and Edelman, theoretically actualizing **The Remembered Present**.

I. Core Paradigmatic Idea: From "Computational Metaphor" to "Life Metaphor"

The mainstream paradigms of traditional mind science, whether manifested as behaviorism's "stimulus-response" chain, cognitivism's "computation-representation" model, or even the "goal-result" system of cybernetic paradigm (such as Anokhin's system-functional theory), have not shaken off the color of mechanism at the level of deep metaphor. They either regard mind as a passive reflex arc, or as a computer processing information, or as a servo

system pursuing set-points.

The revolutionary nature of *The Outline* begins with a thorough perspectival shift (Pillar 1): it adopts the **"life metaphor."** Here, mind is not a "component" or "function" possessed by the living organism, but the very mode of presentation of life itself in dynamic existence. This fundamental turn demands and catalyzes a series of fundamental innovations from object of study to methodology.

II. Reconstruction of Theoretical Cornerstone: The Stream of Sensation as the Unit of Existence

If life is process, then what is its basic unit? *The Outline* gives a clear answer (Pillar 2): the **Sensation-Behavior Cycle**. This definition abandons linear causality and depicts a self-organizing dynamic circuit: systemic sensation originating from life's intrinsic tensions drives behavior (overt or covert), and the results of behavior then serve as new sensory input, continuously shaping the system's state. Mental activity is precisely the myriad ripples stirred up by this eternal stream.

What drives this cycle is not an abstract "drive," but **Expectancy-Sensation Mismatch** (Pillar 3) — the identifiable conflict

between immediate sensation and intrinsic **Expectancy Sensation**. This concept unifies in one stroke all experiences from physiological pain to spiritual emptiness, from prediction error to creative inspiration. Whether it be the motivation for foraging or the desire for problem-solving, their root lies in the system's self-calibration initiated to eliminate some **Expectancy-Sensation Mismatch**. This traces the source of behavior back profoundly from the level of "motivation" ("I want that") to the level of "need" ("I feel unwell"), restoring the vivid state of life full of openness and exploratory nature before the formation of goals.

III. Upgrading the Explanatory Framework: Dynamic Spectrum and Unified Logic

To parse the complex **Expectancy-Sensation Mismatch** and behavioral strategies, *The Outline* proposes the highly original **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** (Pillar 4). It takes Evolutionary Strata (Vital, Social, Noetic) as the warp and the three basic life tensions (Defensive, Offensive, Friendly) as the weft, constructing a three-dimensional, dynamic atlas of the "**Youjue universe**." It reveals that the anxiety in a social interaction (**Social-Defensive**) and the curiosity in scientific

exploration (**Noetic-Defensive**) share the deep logic of "eliminating uncertainty to guard boundaries"; while artistic creation (**Noetic-Offensive**) and social competition (**Social-Offensive**) both originate from the dynamic prototype of "expression and acquisition."

Even more stunning is *The Outline's* revelation of cross-scale **unified generative logic** (Pillar 5): "**Resonance-Evaluation-Consolidation.**" From single-celled organisms achieving group sensing and coordination through chemical signals, to neuronal clusters forming functional unities through synchronized firing, to individuals coalescing into social circles through shared cultural symbols, and ultimately to **Thought Memes** propagating as academic paradigms because they trigger cognitive satisfaction, their formation, consolidation, and survival actually follow the same deep law: through sustained **Reentry** or interaction, pattern resonance is achieved, evaluated by the system's intrinsic **Valence Sensation** (or evolutionary pressure), and finally selected and consolidated because it brings systemic efficacy enhancement. This discovery enables the grand epic from microbial cooperation to civilizational evolution to be seamlessly traversed with the same language of life self-organization principles.

IV. Reconstruction of the Conceptual System: Warm Disenchantment and Integration

Within this framework, *The Outline* thoroughly and elegantly reconstructs (Pillar 6) a series of core concepts, freeing them from philosophical burdens and disciplinary barriers:

- **Need** is returned to its nature as intrinsic "sensation deviation."
- **Emotion** is clarified as a directional systemic regulatory signal about "agentic evaluation" (positive Emotion as flow reward, negative Emotion as correction alarm).
- **Consciousness** is interpreted as the phenomenon of "self-illumination" when complex **Sensation-Behavior Cycles** achieve high-level integration, an emergent property rather than a mysterious entity.
- **Self** is understood as a "dynamic reference point" constructed in the stream of sensation to maintain narrative continuity, whose boundaries are expandable and contractable, naturally encompassing the behavioral spectrum from self-interest to altruism.
- **Will** is revealed as the dynamic process of competition for

systemic dominance among different **Sensation-Behavior Cycles** (such as those driven by long-term values vs. immediate temptations).

This new terminological system, built upon unified logic, achieves a warm "disenchantment" of traditional mental concepts and integrates them into a coherent whole.

V. Methodological Revolution: The Science of Listening to "I Feel"

This theoretical revolution is necessarily accompanied by methodological innovation (Pillar 7). *The Outline* advocates a shift from pursuing absolutely objective "third-person measurement" to an understanding that integrates "first-person/third-person integration." It solemnly elevates first-person reports like "**I feel...**" from being regarded as unreliable subjective noise to being the most authentic state output data of the **Youjue System**, the naïve source of theory and an important basis for validation. This requires researchers to be not only external measurers but also internal empathizers and interpreters, enabling science to truly "understand" rather than merely "explain" life.

It is precisely this methodology that endows *The Outline* with

unparalleled "creative synthesis of intellectual history" capability (Pillar 8). Like a powerful "theoretically integrated present," it treats the great legacies of Pavlov's conditioned reflex, Anokhin's system-function, Edelman's Neural Darwinism, and Simonov and Vyazemsky's need-emotion theories not as miscellaneous parts to be pieced together, but as precious **"Sensation-Behavior Traces"** about the same living entity from different sides, integrating them through **Reentry**-style dialogue within the **Youjue** meta-framework into a fresh, coherent, and more explanatory "present." This is itself vivid proof of its theoretical vitality.

VI. Conclusion: A Humanistic Return of Science

In summary, the far-reaching significance of *Youjue Physiology: An Outline* goes far beyond proposing a new theory. It marks a turning point: mind science begins its regression from the decontextualized "cognitive science" that imitates physics to the "life science" that centers on lived experience and embraces the complete human being. It no longer reduces humans to algorithmic carriers or response sets, but solemnly gazes upon and attempts to understand that life which feels, expects, struggles, and creates.

Its ultimate direction is practical and warm: guiding

individuals to become "**Youjue Persons**" —— lucid self-observers, agentic loop regulators, warm acceptors of inner truth; and envisioning a "**Youjue Ecology**" —— a human civilization with greater empathy, understanding, and resonance. In this sense, *The Outline* is not only an academic work but also a scientific declaration full of humanistic care, pointing out for mind research, trapped in technical confusion, that eternal path of returning to life and leading toward understanding.

From Behavioral Paradigm to Life Integration: The Theoretical Evolution of Classical and Operant Conditioning and the Return to Life-Centeredness

Introduction: A Pair of Paradigms, A Path of Evolution

"Classical Conditioning" and "Operant Conditioning," as the most influential twin paradigms of twentieth-century behavioral science, their relationship far exceeds what simple opposition or complementarity can summarize. The commonality in their naming — "conditioned reflex" — suggests they were initially regarded as different manifestations under the same category of learning phenomena. However, the history of theoretical elaboration surrounding them reveals a magnificent intellectual landscape evolving from **phenomenological classification** to **mechanistic unification**, then elevating to **paradigmatic competition**, and finally advancing toward integration centered on lived experience. This evolutionary path not only maps the deepening of our understanding of learning's essence but also reflects a profound turn in the methodology and philosophical foundations of mind science as a whole: from meticulous depiction of external behavior, to algorithmic

modeling of internal mechanisms, then to the call for teleological holism, and ultimately returning to the solemn gaze upon that living being which feels and acts.

I. Behaviorism: Experimental Paradigm Divergence and the Foundation of Descriptive Models

Behaviorism's great contribution lay in its unparalleled rigor in establishing two sets of manipulable, repeatable **experimental grammars** for studying learning behavior, from which it derived concise and powerful **descriptive models**.

1. **Classical Conditioning Paradigm:** By precisely controlling **stimulus sequences** (e.g., bell preceding food), it revealed how organisms form **expectancy-based physiological responses** to specific cues. Its core model can be summarized as "signal learning" or "stimulus substitution."

2. **Operant Conditioning Paradigm:** By systematically manipulating **behavioral consequences** (e.g., lever-pressing leading to food), it revealed how organisms actively adjust their own behavior to adapt to environmental feedback. Its core model can be summarized as the "law of effect" or "reinforcement selection."

These two paradigms are essentially **methodological**

creations. Through different experimental manipulations (fixed observation vs. free operation; controlling antecedents vs. controlling consequences), they direct the researcher's gaze to different segments of the complete behavioral stream. They do not claim to have discovered two entirely different "mental entities" but rather provide two different prisms for observing the same phenomenon of "conditioned reflex." However, their "black box" strategy suspends internal processes, allowing each paradigm to develop relatively independent explanatory discourses, invisibly laying the groundwork for later theoretical segmentation. More importantly, while their experimental designs pursue objectivity, they inevitably strip the organism from its vivid, complete, teleological life context.

II. Cognitive and Computational Neuroscience: Elegant Unification at the Mechanistic and Algorithmic Levels

The cognitive revolution and the rise of computational neuroscience opened behaviorism's "black box." Researchers were no longer satisfied with describing correlations between stimuli and responses but asked how the brain achieves such associations. In this process, the descriptive-level differences between classical and operant conditioning achieved stunning unification at the deeper

algorithmic and neural mechanism levels.

1. Essence of Predictive Learning: Work represented by the Rescorla-Wagner model thoroughly reshaped the image of classical conditioning. It showed that animals learn not simple stimulus pairings but the **predictive value** of stimuli. The core mechanism is **"prediction error"** — the discrepancy between expectancy and reality drives learning.

2. Unified Computational Framework: Reinforcement learning theory provides perfect mathematical language for this. In this framework, classical conditioning is formalized as learning of the "value function" (what does this signal predict?), while operant conditioning is learning of the "policy function" (what should I do in this situation?). The two share the same learning algorithm driven by prediction error as the signal.

3. Shared Neural Currency: The landmark discovery by Schultz et al. provided the biological cornerstone for this computational framework: midbrain dopamine neuron activity precisely encodes **"reward prediction error."** This signal is both the currency for updating the value of classically conditioned stimuli and the chip for reinforcing instrumental behavior, irrefutably proving that

the two types of learning share an underlying neural evaluation system.

The achievement of this stage is magnificent, welding the two previously parallel descriptive systems together with precise mathematical models and neural mechanisms. However, its perspective remains **third-person** and **mechanism-first**. It describes learning as an efficient computation performed by the brain, but touches only shallowly on why "I" cares about these computations and how these computations emerge from "I"'s **lived experience** to ultimately serve "I"'s holistic existence.

III. Soviet/Russian Systemic Psychophysiology: The Teleological Revolution and Its "Motivational" Level of Expectancy

The Soviet/Russian tradition represented by Anokhin's **System-Function Theory** launched a philosophical revolution against behaviorism and its underlying mechanistic worldview. It argued that understanding behavior must adopt an "activity" paradigm, where behavior is actively organized by the **expectancy of a future "useful result,"** rather than passively triggered by past stimuli.

Its core concept, **"action acceptor of result,"** encodes

precisely this expectancy of a specific functional result. Conceptually distinguishing it from psychology, this expectancy is closer to **"motivation"** — an internal drive combined with a specific goal. For example, the motivation for foraging encodes the concrete result of "obtaining food."

This paradigm's tremendous contribution lies in reintroducing final causes into behavioral science and emphasizing holism, arguing that any response must be understood within a "functional system" serving the final result. However, its starting point at the "motivational" level also constitutes its boundary: it excels at explaining goal-directed behavior but struggles to adequately describe the initial **diffuse, open, undetermined** exploratory state of behavior; it explains what behavior is "for" but does not thoroughly trace back to the deeper source of why behavior "arises" — that **subjective sense of lack (Need)** which precedes any concrete goal and is the mother of motivation.

IV. *Youjue Physiology: An Outline*: Returning to the "Need" Level and Life-Centered Integration

Youjue Physiology: An Outline performed a more fundamental perspectival inversion. This theory shifts the explanatory

foundation from "motivation" (concrete goal) back to the psychological level called "**Need**" — the **subjective experience of objective lack** — and builds a meta-framework capable of integrating all previous discoveries upon this basis.

1. **Foundation: Expectancy Sensation as "Need."** *The Outline's* starting point is Sechenov's **Systemic Sensation** — a total background feeling of internal state. The derivative **Expectancy Sensation** is not a clear-cut "goal" but a **diffuse, value-laden feeling about an "ought-to-be state"** (such as vague hunger discomfort, a hazy exploratory impulse). This is precisely the experiential modality of "**Need.**"

2. **Drive: Expectancy-Sensation Mismatch and Loop Closure.** The fundamental drive underlying all behavior and learning is **Expectancy-Sensation Mismatch** — the conflict between Immediate Sensation and Expectancy Sensation. All life activities can be viewed as efforts to eliminate **Expectancy-Sensation Mismatch** and achieve **Loop Closure** of the **Sensation-Behavior Cycle**. Here, concrete "motivation" and "goal" are reduced to: under the drive of some fundamental "**Need,**" the system discovers and consolidates effective solutions through exploration.

3. Integration: Three-Dimensional Dynamic Taxonomy and Generative Logic. *The Outline* provides a structured dynamic spectrum for all "Needs" through the **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** (tensions of Defensive, Offensive, Friendly $\times$ strata of Vital, Social, Noetic). Whether classical conditioning (establishing prediction) or operant conditioning (selecting strategy), both are adaptive generative processes undertaken by specific life tensions in concrete situations to eliminate **Expectancy-Sensation Mismatch**.

4. Transcendence: From Computational Instruction to Neural Selection. *The Outline's* neuroscientific foundation is Edelman's **Neural Darwinism** (selectionism), not the instruction model of computationalism. The brain is not a computer executing prediction-error algorithms but a dynamic system that selects among variant functional clusters driven by **Valence Sensation**. This provides a deeper foundation for understanding the creativity, diversity, and individual differences in behavior.

Conclusion: From Paradigm Evolution to Life Return

The trajectory of theoretical evolution clearly marks every effort we make to approach "the real":

1. **Establishing experimental paradigms and descriptive models (behaviorism):** We learned how to cut and measure behavioral phenomena from different angles.

2. **Discovering unified algorithms and neural mechanisms (computational neuroscience):** We revealed the shared "how" behind those phenomena.

3. **Initiating a teleological revolution pointing to motivation (systemic psychophysiology):** We called for attention to the "why" of behavior serving life.

4. **Returning to the feeling subject and achieving integration (*Youjue Physiology: An Outline*):** We finally turned around to face the source where all phenomena, mechanisms, and purposes arise — that **Youjue life** which feels, expects, and continuously seeks balance and meaning in the world through action.

The ultimate ambition of *Youjue Physiology: An Outline* lies not in replacing any specific theory but in providing a sufficiently deep and broad **meta-framework** that allows us to treat the exquisite behavioral experiments, precise brain algorithms, and profound teleological insights all as precious "memories" about the same living entity, and to re-understand them in the "present" pulsating with

the **Sensation-Behavior Cycle**, thereby truly enabling science to **embrace complete life**. This is not only the evolutionary endpoint of learning theory but also a warm return of scientific worldview and philosophy.

From Motivation to Need: On the Essential Deepening of Expectancy Theory in *Youjue Physiology: An Outline*

Introduction: The Theoretical Division in the Need-Motivation Chain

In the classical framework of psychology, the internal drive of behavior can be parsed into a clear chain: an objective state of deficiency constitutes **"Need" (demand)**; when Need is reflected in individual consciousness, it becomes the subjective **"need"**; when need combines with a specific goal, it is transformed into **"Motivation"** that propels action; the concrete result toward which Motivation is directed and which activity aims to achieve is the **"Goal."** This continuum from "deficiency" to "result" provides us with a clearly stratified conceptual map for understanding behavior.

However, when we examine how different schools interpret "expectancy" in behavior, we find that they occupy entirely different positions along this chain. The **systemic psychophysiology** represented by Anokhin's "system-function theory" encodes "expectancy" in its core concept, the **"action acceptor of result,"** as essentially a **clear future-result model already combined with a**

concrete goal, and is therefore closer to the level of "**Motivation.**" By contrast, the "**Expectancy Sensation**" proposed in *Youjue Physiology: An Outline* is a **diffuse, value-laden feeling of an "ought-to-be" state** that exists prior to any concrete goal, corresponding more closely to the subjective reflective level of "**need.**" This fundamental difference in positioning determines the differing explanatory depth, philosophical foundation, and integrative potential of the two theoretical systems.

I. Systemic Psychophysiology: Constructing Teleological Explanation at the "Motivational" Level

The revolutionary contribution of systemic psychophysiology lies in its resolute shift of behavioral explanation from the mechanism of "stimulus-response" to the teleology of "goal-orientation."

1. Core Tenet: Expectancy as a Concrete Goal Model

The school's core concept, "**action acceptor of result,**" is defined as a neural encoding of a behavior's future "useful result." It is not a vague craving but a relatively **clear, functional, modeled result expectancy**. For example, the "action acceptor of result" for an animal's foraging behavior encodes the concrete functional result of "obtaining food to eliminate hunger." This expectancy

corresponds directly to "Motivation" in psychology — an internal drive transformed from hunger need and directed toward the specific goal of "obtaining food."

2. Theoretical Contribution: Introducing Final Causes and Holism

This framework successfully reintroduces final causes as a legitimate explanation for behavior. It answers the question: "What concrete useful result is this behavior for?" Simultaneously, it emphasizes holism, arguing that any response must be understood within a "functional system" that serves this ultimate result. This undoubtedly represents a major transcendence of behaviorism's fragmentary perspective.

3. Inherent Limitation: Explanation Trapped at the "Motivational" Level

However, precisely because its starting point lies at the "Motivational" level, systemic psychophysiology faces an essential boundary of explanation:

- It presupposes the clarity of goals: its theoretical model is better suited for explaining situations with clear goals and relatively fixed behavioral sequences (such as instinctive

behaviors, skilled skills), but is weaker in explanatory power for the initial diffuse, exploratory, undetermined state of behavior.

- It skips the questioning of the source of drive: it explains what behavior is "for" but does not thoroughly answer "why this goal" and, more fundamentally, "why act at all." It accepts the transformation from hunger need to foraging motivation but does not deeply excavate the essence of "hunger" as a subjective feeling state and how it emerges as the ultimate drive of behavior.
- It retains a cybernetic, objectified perspective: the "action acceptor of result," as an encoded "result model," remains a functional set-point that can be observed and described by a third party; the theoretical center of gravity has not fully shifted to the living, feeling subject that bears this expectancy.

II. *Youjue Physiology: An Outline*: Returning to the "Need" Level and the Ontology of Sensation

Youjue Physiology: An Outline performs a more thorough perspectival inversion: it shifts the theoretical starting point from "Motivation" (concrete goal) back to the psychological level called

"need" — the **subjective experience of objective lack** — and rebuilds the entire understanding of the behavioral drive chain upon this foundation.

1. Cornerstone: Expectancy Sensation as Diffuse Need

The Outline's departure point is Sechenov's **Systemic Sensation** — a total background feeling of one's internal state. The derivative **Expectancy Sensation** is not a concrete goal blueprint but a **diffuse, value-laden feeling about an "ought-to-be" state**. For example, it is not "I want to obtain that rabbit to the east," but "I feel a discomfort of energy deficiency (hunger), and my system expects a satisfaction that eliminates this discomfort, but with undetermined direction." This precisely corresponds to the definition of **"need"** in psychology — the subjective reflection of an objective state of deficiency (Need). This reflection is full of tension and drive, but remains open to goals.

2. Fundamental Drive: Expectancy-Sensation Mismatch Driving Loop Closure

Starting from this diffuse **Expectancy Sensation**, *The Outline* proposes the fundamental principle driving all behavior and learning: **Expectancy-Sensation Mismatch**. That is, when **Immediate**

Sensation conflicts with **Expectancy Sensation**, the system is in a state that needs tuning. Eliminating **Expectancy-Sensation Mismatch** and achieving **Loop Closure** of the **Sensation-Behavior Cycle** is life's most fundamental mission. Here, Motivation (directed toward a concrete goal) and Goal (the concrete result to be achieved) are reduced to: under the drive of some fundamental "**need**" (systemic sensation deviation), the system discovers and consolidates an effective solution through exploration. Motivation and Goal are **derived, concrete solutions**, while **need** and the resulting **Expectancy-Sensation Mismatch** are the **original problem itself**.

3. Integrative Framework: Three-Dimensional Dynamic Taxonomy and Dynamic Generation

The Outline provides structure for the content of "needs" through the **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** (tensions of Defensive, Offensive, Friendly $\times$ strata of Vital, Social, Noetic). All needs can be reduced to the three basic life tensions — **Defensive** (guarding), **Offensive** (acquiring), **Friendly** (connecting) — specified across the three strata. The formation of a concrete "Motivation" is precisely the process where, on a certain tension dimension (e.g., Offensive-Vital), to eliminate

a specific **Expectancy-Sensation Mismatch** (such as hunger sensation), the system dynamically generates an optimal strategy in real-time situations based on past **Sensation-Behavior Traces**.

III. Comparison and Integration: From Motivational Explanation to Need Traceability

Through the lens of the **Need-Motivation chain**, the relationship and relative superiority of the two theories become clear:

1. Explanatory Level

- **Systemic Psychophysiology: Motivation/Goal level** (already combined with concrete goal)
- ***Youjue Physiology: An Outline*: Need level** (subjective sense of lack prior to concrete goal)

2. Essence of Expectancy

- **Systemic Psychophysiology**: Clear, modeled encoding of functional results
- ***Youjue Physiology: An Outline***: Diffuse, value-laden systemic sensation tendency

3. Core Question

- **Systemic Psychophysiology**: What concrete goal is the behavior for?

- ***Youjue Physiology: An Outline:*** What fundamental sensation deviation (Need) does the behavior stem from?

4. Philosophical Orientation

- **Systemic Psychophysiology:** Cybernetic, third-person teleology
- ***Youjue Physiology: An Outline:*** Phenomenological, first-person ontology of sensation

5. Explanation of Initial Behavioral Stage

- **Systemic Psychophysiology:** Weak (goal is preset)
- ***Youjue Physiology: An Outline:*** Strong (open exploration, goal emerges)

6. Theoretical Inclusiveness

- **Systemic Psychophysiology:** Relatively closed, emphasizing the unity of goal-orientation
- ***Youjue Physiology: An Outline:*** Highly open, can accommodate the continuous spectrum from diffuse intention to precise goal

***The Outline's* Integration and Transcendence of Systemic Psychophysiology is Manifested In:**

1. Incorporating "Goal" into the Generative Process: *The*

Outline understands the "concrete goal" that systemic psychophysiology focuses on as the product that is gradually **concretized and clarified** from diffuse **Expectancy Sensation** through interaction with situations within the **Sensation-Behavior Cycle**. Goal is not the starting point but the **crystallized endpoint** of sensation dynamics in context.

2. Providing Deeper Drive Explanation: It answers the questions that systemic psychophysiology did not thoroughly pursue: Why does this goal form? The answer lies in the deeper level of "**need**" and the resulting **Expectancy-Sensation Mismatch**. The reason a foraging goal forms is rooted in the **Expectancy-Sensation Mismatch** (hunger) on the dimension of Offensive tension (energy balance).

3. Restoring Vividness and Openness to Behavior: By being rooted in diffuse "**need**," *The Outline*'s theory can perfectly explain the tentative, variable, context-dependent, and creative nature of behavior. The exploration of an animal driven by hunger has open paths and real-time discovered goals; this is precisely the vivid embodiment of life agency.

Conclusion: Toward a Behavioral Science with Life Sensation as its Source

From systemic psychophysiology to *Youjue Physiology: An Outline* marks our understanding of behavioral expectancy having completed a deep traceability from "**Motivation**" to "**Need.**" This is not only a deepening at the explanatory level but, more fundamentally, a **conversion of philosophical foundation**: from viewing life as a "goal-directed system" pursuing specific functions to understanding life as a "**Youjue subject**" that exists in sensation, acts because of sensation, and continuously engages in creative generation for the balance of sensation.

With its insistence on the level of "**need**" (**Expectancy Sensation**), *The Outline* successfully anchors Motivation and Goal in the irreducible first-person experience of life — that is, in **Sensation**. It tells us that the most primordial fuel and ultimate meaning of all clear goals, exquisite strategies, and complex learning come from that living life itself which is feeling, expecting, and striving to achieve some sensation balance through action.

Therefore, if future behavioral science wishes to truly understand "why it acts thus," it cannot be content merely to draw clear

functional maps at the level of "motivation and purpose." It must be brave enough to dive into that seemingly vague but actually powerful ocean of "**need**" —— that is, the stream of life sensation —— to explore the true source from which all action surges. This is precisely the path toward a warmer and deeper scientific future that *Youjue Physiology: An Outline* points out for us.

Life Empiricism: A Scientific Revolution with the Subject as Measure

This essay proposes the paradigm of "**Life Empiricism**" to address the fundamental limitations of traditional science in understanding the subjective experience of life. This paradigm asserts that the core of research should shift from objective mechanisms to the living "**Youjue System**" subject, and is grounded in three principles: acknowledging first-person experience as fundamental fact; taking "subject-internalization-and-change" as the criterion of validation; and viewing traditional scientific data as **corroborative traces** of the subject's state. Its methodology takes the **Sensation-Behavior Cycle** as its unit, mapping the generative logic of individual life through phenomenology, historical tracing, and systems analysis. The researcher acts as an "**empathetic architect**", needing to integrate scientific, philosophical, and humanistic wisdom. Life Empiricism does not replace tradition but dialogues with and **sublimates** it, aiming to establish a subjective science that takes life's own experience as its measure, achieving deep understanding and safeguarding of life's complexity.

Opening: When Science Encounters "I'm Hungry"

Science can explain "I'm hungry." It can track the decline of blood glucose concentration, measure the contractile rhythms of the stomach wall, locate neuronal firing in the hypothalamic feeding center, and depict the complete causal chain from genes to behavior. This is a grand, objective, third-person victory.

Yet science still cannot answer a more fundamental question: **"What is this 'experience itself' of 'I'm hungry'?"** It cannot explain why that series of biochemical events presents as a **subjective feeling** of urgency, anxiety, and food-directedness, rather than some other form. Science depicts the world's shadow but maintains an awkward silence toward the entity casting that shadow — the **"Youjue subject"** that is experiencing.

This silence is precisely the root of the foundational dilemma in contemporary life science, especially mind science. We have accumulated massive amounts of "objective data" about brains and behavior, yet remain bewildered about how "subjective life" emerges from it. Data grows increasingly abundant while theories become ever more fragmented. We seem to possess a complete parts list and wiring diagram for a precision machine, yet utterly fail to

understand what program this machine is "running" and why it runs it.

Life Empiricism is a thorough response to this dilemma. It declares: to understand life, we must shift the scientific searchlight from endless tracing of "objective mechanisms" to the brave, systematic investigation of "**subject fact.**" Its empirical core is not objective variables divorced from the subject but **the living, first-person "Youjue System" itself.** The various discoveries of traditional empiricism will be repositioned within this framework — not as the end of explanation but as **corroborative resonant traces** of the subject's state.

I. Refounding Cornerstones: The Three Principles of Life Empiricism

The legitimacy of Life Empiricism is built upon three successive principles that together transform "subjectivity" from an interference term in scientific research into core evidence.

Principle 1: Irreducible First-Person Fact

"I hurt," "I miss you," "I understand" — these statements are not "coarse descriptions" of some inner physical state; they are **the most primordial, direct operational output of the living**

system, irrefutable "system state reports." Just as the height of mercury in a thermometer is itself a physical fact, "**I feel...**" is also a biological fact of the living system. It is the **starting point and calibration point** for all research; any "objective explanation" that conflicts with it warrants suspicion, not the reverse.

Principle 2: Understanding as Internalization, Change as Validation

For living systems, true "understanding" is not external model-fitting but the process where that understanding is **accepted by the system's own value system and triggers positive transformation of systemic state**. No matter how elegant a theory about a phobia may be, if it cannot help a patient reduce avoidance behavior and lower anxiety experience, its "understanding" is incomplete. The validation of life occurs within the system: when an interpretation is accepted by the subject ("Ah, exactly!") and thereby catalyzes a new, more adaptive **Sensation-Behavior Cycle**, this is the most fundamental **empirical validation**.

Principle 3: Traditional Data as "Corroborative Traces of Subject State"

Neuroimaging, biochemical indicators, behavioral records —

these are not useless. Within the Life Empiricism framework, they are redefined as "**multimodal signatures of the subject's internal state**" or **resonant traces**. When a subject reports deep sadness, the specific activation patterns of their amygdala and anterior cingulate cortex are not the "cause" of sadness but the **physical features synchronously presented at the biological level of this subjective state**. They provide **objective corroboration and cross-modal richness** to the subject's report, much like providing a sonic spectrogram for a melody, making research more rigorously dialogical.

II. Methodology: Mapping the Generative Logic of the "Youjue System"

Based on the above principles, Life Empiricism develops a unique methodology aimed at systematically mapping the generative logic of a **Youjue System**.

Core Analytical Unit: Sensation-Behavior Cycle

Life is understood as existing through the eternal **Sensation-Behavior Cycle** to maintain and expand itself. Any experience or action can be understood within this cycle. "Sensation" includes all internal states from primal pain to abstract unease; "behavior" includes all outputs from bodily movement to contemplative thought.

Research is the deep genealogical investigation of those key **Sensation-Behavior Cycles** that have shaped the individual's destiny.

Three-Dimensional Integrative Interpretive Path:

1. Phenomenological Deep-Description (Anchoring "Sensation" Itself): Precisely capture the texture, structure, and dynamics of first-person experience. Not content with "anxiety," it inquires: "Where in the body is this anxiety? Is it mobile or fixed? Is it a burning or constricting sensation? What imagery or thoughts accompany it?" This establishes an irreducible **experiential baseline** for the entire investigation.

2. Generative Historical Tracing (Tracking the Origin of the "Cycle"): Explore how the current dominant cycle was formed in the individual's life history. Through in-depth narrative interviews, reconstruct how key **Sensation-Behavior Traces** were cast, reinforced, and transformed. Understanding a "social phobia" cycle must return to its original formation in the "public expression-shame" closed loop created through ridicule or neglect.

3. Systemic Dynamic Analysis (Presenting the "Network" of the Present): Treat the subject's current state as the flux of a **dynamic network** constituted by multiple competing, cooperating,

or interfering **Sensation-Behavior Cycles**. Analyze how resources are allocated among them, how dominant cycles suppress or derive other cycles, and how network structure evolves with time and intervention. This explains why "knowing I shouldn't be afraid" cannot stop the fear — because the new cycle at the **Noetic Stratum** cannot defeat the old cycles already entrenched at the **Vital or Social Strata**.

Role of the Researcher: Empathetic Architect

The researcher is not a detached observer but an **empathetic architect**. He/she needs to:

- **Deeply empathize:** Immerse in the subject's experiential world and understand its internal logical coherence.
- **Think systematically:** Identify the dynamic types (Defensive, Offensive, Friendly) and strata (Vital, Social, Noetic) of different cycles.
- **Generatively intervene:** Based on understanding, co-design "new cycle experiments" with the subject, such as designing "tiny, safe social contact-positive feedback" closed loops for social avoiders to cultivate new possibilities.

Practical Wisdom: Profound Inspiration from TCM Methodology

The TCM concepts of "**observing-listening-inquiring-pal-pating**" and "**treating pre-illness**" provide valuable methodological prototypes for Life Empiricism.

- **Cyclical "Re-sensation" Diagnosis:** TCM diagnosis is not a one-time labeling. Initial "observing-listening-inquiring-pal-pating" forms a preliminary hypothesis about the system's im-balanced cycle (e.g., "liver depression and spleen deficiency"). After intervention through medication or acupuncture, "ob-serving-listening-inquiring-palpating" is performed again, which is essentially a "**re-sensation**" of the system's output, observing the flux of the cycle post-intervention, and adjusting strategy accordingly. This is a typical **closed-loop optimization process** of "Sensation (diagnosis) → Behavior (inter-vention) → Re-sensation (formula adjustment) → Re-be-havior," until the dominant pathological cycle is reversed and the system restores a relatively balanced state of **Loop Closure**. This is precisely the vivid portrayal of "dynamic network flux" tracking and "empathetic architectural" intervention in Life

Empiricism.

- **Proactive Wisdom of "Treating Pre-illness":** The essence of "treating pre-illness" lies in identifying the initial, minuscule imbalanced cycle (such as a "wood overacting on earth" trend caused by chronic tension) and intervening to regulate it before it consolidates into a serious pathology. This corresponds to the identification and reshaping of early, minor but maladaptive-development-trending **Sensation-Behavior Cycles** in Life Empiricism, a proactive "health architecture" based on systemic dynamic prediction.

III. Broad Demonstration: Universality of Life Empiricism Scenarios

Life Empiricism is by no means limited to clinical dilemmas. It applies to any situation attempting to understand a **Youjue System**:

- **Education:** A student's "inability to learn" cannot be captured by labels like attention deficit (pathological) or laziness (moral). Life Empiricism actually explores: what kind of unpleasant **Systemic Sensation** does the learning task trigger (such as boredom, powerlessness)? With which **"failure-**

shame" cycle traces in the student's past does it resonate?
How can learning cycles be designed to more frequently generate positive feedback of "intellectual curiosity → understanding insight"?

- **Artistic Creation:** An artist's creative block can be viewed as the depletion of old "**Sensation-Expression**" cycles. Life Empiricism helps the artist differentiate their dominant creative drive (is it **Noetic-Offensive** expressive desire or **Social-Friendly** connection-seeking?) and facilitates the birth of new cycles through introducing new perceptual experiences or technical challenges.
- **Organizational Behavior:** A team's stagnation in efficacy stems from mismatch or conflict between individual **Sensation-Behavior Cycles** and organizational goal cycles. From the Life Empiricism perspective, management is no longer control but **coordinating resonance fields of different Youjue Systems** and shaping **Shared Sensation-Behavior Patterns** that can trigger universal positive value evaluation.
- **Everyday Experience:** Even an individual's pursuit of happiness can gain clearer navigation by analyzing which cycles at

which strata (health at the **Vital Stratum**, love at the **Social Stratum**, meaning at the **Noetic Stratum**) achieve adequate **Loop Closure** and whether resource allocation is imbalanced.

IV. Symphony with Tradition: In a Broader Resonance Field

Life Empiricism does not emerge from nothing; it is situated within humanity's grand symphony of self and world-understanding, engaging in profound dialogue with traditional natural science, philosophy, literature and art, and religious faith, jointly playing a multi-voiced movement around the life subject.

- **With Traditional Natural Science (Corroboration and Sublimation):** As previously mentioned, objective data and models from neuroscience, psychology, etc., provide **cross-modal corroboration and mechanistic background** for the subject's internal state. Life Empiricism then **subsumes these discoveries under the perspective of subject experience**, asking what they mean for "lived experience," achieving a sublimation from "third-person description" to "first-person understanding."
- **With Philosophy (Foundation and Clarification):**

Phenomenological philosophy provides a strict methodological foundation for "facing facts themselves" and describing first-person experience; existential philosophy profoundly touches upon life's meaning, anxiety, and choice. Life Empiricism can be seen as an **"embodied, generative phenomenological-existential practice"** that transforms philosophy's profound questions into operable systemic analytical frameworks and intervention practices, seeking answers in concrete life.

- **With Literature and Arts (Resonance and Presentation):**
Literature and art are the great experimental fields and resonance boxes of human subjectivity. They present complex networks of sensation, subtle fluxes of emotion, and struggles and births of meaning in ways that transcend concepts (such as Dostoevsky's deep depiction of guilt, the inner vortices conveyed by Van Gogh's twisted starry skies). Life Empiricism draws **"depth of empathy"** and **"richness of expression"** from literature and art, learning to touch and express life's shadows and radiance more subtly. Simultaneously, it attempts to provide a systematic interpretive language for such intuitive

grasp that is dialogical and verifiable.

- **With Religious Faith (Transcendence and Settlement):** Religious faith deals with the "Sensation-Behavior Cycle" of life at the ultimate scale — anxiety about finitude, craving for meaning, conversion to and dialogue with the transcendent. It provides paths to integrate the individual's tiny cycle into some grand, eternal closed loop, thereby bringing deep peace and meaning. Life Empiricism studies with respectful attitude how this **"ultimate Friendliness"** dynamic operates within the individual system, how it helps the subject settle existential anxiety, without involving the truth or falsity of its transcendental object. It acknowledges that beyond **"understanding"** at the **Noetic Stratum**, there exists an ultimate meaning closed loop that needs to be **"closed"** in different ways (faith, devotion, mystical experience).

These traditions are not isolated from each other but, within the framework of Life Empiricism, form complementary resonance circles around the core of the **"Youjue subject"**: philosophy provides foundation and sharpness, science provides corroboration and detail, literature and art provide depth and expression, and faith

provides transcendence and settlement. The work of Life Empiricism is to become a humble and systematic "**translator**" and "**integrator**," orchestrating these different-voiced wisdoms harmoniously when understanding and helping a concrete life.

V. Conclusion: Toward a Science of the Subject

Life Empiricism is a paradigm revolution that shifts the center of gravity of science from the "ten thousand things" back to "the heart within." It does not deny the laws of the objective world but insists that **for life, the most fundamental reality is the world that it itself senses and experiences.**

It demands that science not only dare to measure the trajectories of stars but also dare to gaze into the abyss of suffering; not only be skilled at analyzing gene sequences but also be keen to listen to the entire history and possibilities contained in an "**I feel...**"; not only draw on philosophy's rigor, art's acuteness, and faith's profundity, but also forge these wisdoms into a practical power that can truly accompany life's growth and flux.

Perhaps this is the most profound manifestation of the scientific spirit: not to tailor nature with human rulers but to lay down arrogance and learn to understand life by life's own logic. Only

when we finally begin to earnestly treat the unique world experienced by each irreproducible "I" can a truly profound, warm science about "us" slowly unfurl its scroll.

Life Empiricism is precisely the prelude to this new scroll. With the subject as measure and experience as evidence, amidst the resonance of humanity's entire heritage of wisdom, it invites us to jointly step into a more complete and more authentic era of life science.

"The Remembered Present": On the Theoretical Construction Paradigm of *Youjue Physiology: An Outline*

The birth of *Youjue Physiology: An Outline* marks the self-conscious emergence of a new theoretical paradigm of mind and life. It not only proposes a series of propositions about the "Youjue System," but more importantly, it itself constitutes a profound practice concerning how theory is possible. What this work demonstrates is neither simple induction of scattered facts nor a purely logical castle in the air, but rather a highly heuristic "generative" mode of theoretical construction that fuses historical, dialectical, and systematic dimensions into one furnace. The core of this approach, as aptly as its own quoted core concept — **"The Remembered Present."**

I. Historical Construction: As Genealogy of Thought through "Reentry" and "Selection"

The Outline's theoretical starting point reveals a sober historical consciousness. It does not claim to create out of thin air but explicitly positions itself within a long intellectual river flowing from Robert Whyt, Ivan Sechenov, to Pavel Simonov, Yuri

Vyazemsky, and onward to Gerald Edelman. However, the author does not simply recite history but instead performs a **Neural Darwinism-style theoretical selection and recombination**.

He views the various insights from intellectual history — Sechenov's "Systemic Sensation," Edelman's "Reentry" and "Dynamic Core," Simonov's need theory, Vyazemsky's "Ennead of Needs" model — as precious "**Sensation-Behavior Traces**" or "**Thought Memes**" left by evolution. His constructive work is to enable these thought memes from different traditions and scales to engage in large-scale "**Reentry**"-style dialogue and competition within the "**Youjue**" framework he has set. Ultimately, those thought elements that can effectively explain the unity of life and are favored by "**Valence Sensation**" (the theory's explanatory power, simplicity, and warm humanistic care) are **selectively consolidated** and integrated into a new functional cluster — the theoretical "**Dynamic Core**" that is *Youjue Physiology: An Outline*.

Therefore, this *Outline* itself is an actualization of "**The Remembered Present**" at the level of thought. It integrates theoretical memories from the past into the creative construction of the present, generating a "now" with greater inclusiveness and explanatory

power. This gives the theory deep roots and a sense of coherent lineage, avoiding the emptiness of a sourceless water.

II. Dialectical Construction: Grasping Life in Tension and Flux

The theoretical skeleton of *The Outline* is full of the vitality of dialectics. It refuses simplistic either/or reductionism and always grasps life's complex essence within dynamic unity of opposites.

1. Distinction Between Surface and Depth: It strictly distinguishes between "overt behavior" and "intrinsic tension." An aggressive behavioral act may have **Defensive** (boundary-guarding) as its deep dynamic; a silent withdrawal may have **Offensive** (strength-accumulating) as its intrinsic tension. This breaks the mechanical mapping of behaviorism and requires researchers to penetrate appearance and reach the dynamic field of "Systemic Sensation" that drives behavior. This is precisely the subtle application of the dialectical relationship between phenomenon and essence, form and content, in behavioral science.

2. Distinction Between Dominant and Background: The theory proposes the coexistence and flux of "**Dominant Youjue**" and "**Background Youjue.**" Life at any moment is not a solo of single

dynamics but a symphony composed of multiple dynamics. The three basic tensions of **Defensive, Offensive, and Friendly** undergo real-time fluctuation, competition, and cooperation at different concentrations across strata (Vital, Social, Noetic). This "dynamic field" model transcends static classification and depicts a dialectical picture of life continuously dancing between stability and variability, focus and horizon, structure and process.

3. Distinction Between Innate and Learned: By introducing the spectrum of "**Innate Expectancy Sensation**" and "**Learned Expectancy Sensation**," and unifying them under the learning engine of "**Expectancy-Sensation Mismatch**," *The Outline* skillfully reconciles the ancient debate between evolutionary determination and experiential shaping. The innate provides the value baseline and deep gravitational pull; the learned performs contextual filling and fine calibration. The two are not oppositional but synergistically shape life's unique trajectory in the continuous operation of the **Sensation-Behavior Cycle**.

III. Systematic Construction: Isomorphic Logic and Cross-Stratal Unity

The Outline's most ambitious theoretical aspiration lies in its

construction of a highly autonomous and universalized generative system. Its systematicity manifests on two levels:

1. Unity of Basic Unit: It establishes the "**Sensation-Behavior Cycle**" as the sole basic unit for explaining all mental and life phenomena. From the most primitive pain reflex to the most complex cultural creation, all are reduced to different complex forms of this closed loop. This provides unified analytical "**currency**" and measurement standards for the theory, achieving systematicity in descriptive language.

2. Isomorphism of Generative Logic: The book's most revolutionary insight lies in revealing that from the chemical coordination of single-celled organisms, to neuronal clusters (neural level), to social circles (social level), and onward to thought paradigms (cognitive level), the underlying logic of their formation, consolidation, and evolution actually all follows the **isomorphic trilogy of "Resonance-Evaluation-Consolidation."** The cohesion of a scientific school and the stability of an intracerebral functional cluster share the same life-organizing principle of "**achieving integration through Sensation-Behavior pattern resonance, followed by selective consolidation via positive value evaluation.**" This insight

elevates *The Outline* from a psychological or physiological theory to a **universal philosophy of complex system generation**, achieving systematic closure of cross-stratal explanation.

IV. Paradigmatic Significance: Theoretical Turn from "Interpreting the World" to "Generative Guidance"

The construction mode of *Youjue Physiology: An Outline* ultimately points toward a fundamental shift in theoretical paradigm.

It is no longer satisfied with being a bystander "depicting shadows" (phenomena of consciousness) but demands "turning around to embrace the entity" (life itself). Therefore, its theory is not only **descriptive** but also **generative** and **guiding**. By providing tools such as the "**Three-Dimensional Dynamic Taxonomy**" and "**dominant-background analysis**," it aims to enable readers (a "Youjue System") to perform self-observation, self-analysis, and self-guidance. The end of theory is the beginning of practice — becoming a **Youjue Person**.

This orientation of designing theory itself as an "intervention tool" or "consciousness-raising framework" enables *The Outline* to transcend the value-neutral posture of traditional scientific theory, containing a gentle yet profound **philosophical-anthropological**

concern. It not only explains how life operates but also invites life to use this theory as a mirror to achieve more lucid, more agentic, and warmer operation.

Conclusion

In summary, the theoretical construction of *Youjue Physiology: An Outline* is a self-conscious methodological practice. It weaves a life theoretical system that is both deeply rooted in profound scientific thought tradition and highly original and integrative, taking **"The Remembered Present"** as its historical path, **"dialectical tension"** as its internal logic, and **"isomorphic generation"** as its systematic architecture. It shows us that a great theory can be like the very life it seeks to describe — a warm, agentic **"Youjue"** existence that generates in history, grows in dialectics, and achieves self-consistency in system. This is perhaps the most precious insight *The Outline* offers us, beyond its specific propositions, concerning **"how theory is possible."**

From "Diffuse Discomfort" to "Fortuitous Resonance": On the Paradigm Revolution and Explanatory Elegance of *Youjue Physiology*: *An Outline*

I. Prologue: A Challenge Posed — Those Psychological Experiences "Beyond Goals"

When examining scientific theories of mind and behavior, we often carry with us certain "troublesome" everyday experiences as touchstones. For instance:

1. Diffuse Discomfort and Fortuitous Comfort: One feels inexplicable boredom, emptiness, and restlessness at home (neither hunger nor thirst), until aimlessly wandering to a willow-lined riverbank, or being drawn to a book accidentally opened on the shelf, does one suddenly feel "extremely comfortable" or "truly fulfilled."

2. Unbidden Emergence of Inspiration: Not directed at any specific problem, an idea suddenly intrudes into consciousness, carrying its own intense sense of meaning and value, like a light illuminating chaos.

These phenomena once led us to question certain classical

theories. Take Anokhin's "System-Function Theory" as an example: its core is the "action acceptor of result" — a pre-set predictive model about a future beneficial outcome (i.e., Bernstein's "future model of need"). This goal-oriented paradigm is extremely powerful when explaining behavior with clear purposes (such as problem-solving or skill acquisition), yet appears somewhat inadequate, even "forced," when confronted with the aforementioned "diffuse discomfort without clear goals" and "inspiration emergence not oriented by problems." This prompts us to ask: Does there exist a more fundamental, more inclusive framework capable of unifyingly explaining both the purposiveness and the generativity of mind, encompassing those rich experiences that occur "beyond goals, on the margins of expectation"?

The emergence of *Youjue Physiology: An Outline* is precisely a magnificent response to this fundamental inquiry. It not only provides an answer but also launches a paradigm revolution that reshapes our way of understanding life and mind from its foundational logic.

II. Core Revolution: From "Goal Model" to "Stream of Sensation"

The subversiveness of *The Outline* lies in its resolute leap out of the traditional motivational psychology and partial physiological frameworks that start with "goals," "results," or "needs," returning to a more plain, more primordial starting point: life as a **Youjue System's** immediate "sensation" state.

1. Cornerstone Shift: "Systemic Sensation" Replaces "Goal Model"

- **Traditional Bottleneck:** Theories such as "System-Function Theory" anchor behavior to predictive models of "future beneficial results." When behavior lacks clear goals (such as diffuse boredom), the explanation of such models falls into difficulty.
- **Breakthrough of *The Outline*:** It points out that the fundamental driver of behavior is not a distant "goal," but the system's overall representation of its own state at the present moment — **Systemic Sensation**. This vague background of "bodily comfort or discomfort" is the integration of Proto-Sensations like hunger and pain, and also the deep seabed upon

which emotion and consciousness rise and fall. All behavior, whether with clear goals or not, is most directly driven by the desire to change an undesirable current **Systemic Sensation**.

2. Core Unit: "Sensation-Behavior Cycle" Replaces "Stimulus-Response Arc" or "Goal-Action Chain"

- *The Outline* defines the basic operating unit of life as the **Sensation-Behavior Cycle**: Immediate **Systemic Sensation** drives behavior (overt or covert), and the results of behavior serve as new sensory input, directly changing **Systemic Sensation**, thus cycling endlessly. This is no longer a linear progression toward a fixed goal, but a self-organizing process of dynamic adjustment and open exploration based on sensory feedback.

3. Source of Drive: "Expectancy-Sensation Mismatch" Replaces "Need Deficiency"

- The core engine driving this cycle is **Expectancy-Sensation Mismatch** — the identifiable conflict between immediate **Systemic Sensation** and intrinsic **Expectancy Sensation**. This **Expectancy Sensation** includes both the innate baseline shaped by evolution (such as deep presets regarding safety,

energy, and rhythm) and the specific situational expectations formed through individual experience. All levels of "discomfort" and growth stem from the conflict between expectation and reality. That "unspeakable discomfort" felt at home is precisely the manifestation of **Expectancy-Sensation Mismatch** between immediate sensations (monotony, emptiness) and deep expectancy (the environment should provide moderate stimulation and meaning).

III. Elegant Explanations of "Troublesome Phenomena"

Based on the above framework, *The Outline* provides seamless explanations for the opening phenomena:

Explanation of "Diffuse Discomfort and Fortuitous Comfort":

1. Initiation: The feeling at home is a diffuse **Systemic Sensation deviation**, originating from **Expectancy-Sensation Mismatch** between the immediate environmental sensation and the individual's **Expectancy Sensation** (a mixture of innate and learned) regarding "meaningfulness" or "friendliness." This is a discomfort at the **Noetic-Defensive** level (an alarm for the lack of meaning) or **Social-Friendly** level (altruistic attachment).

2. Exploration: Taking a walk or flipping through books is not

searching for a preset goal but a spontaneous, generalized exploratory behavior (**Noetic-Defensive** or **Friendly**) driven by **Expectancy-Sensation Mismatch**, aiming to change sensation by altering input.

3. Turning Point: When the riverside scenery (**Friendly** rhythmicity) or ideas in the book (**Thought Memes**) accidentally produce strong "resonance" with the individual's deep **Expectancy Sensation** tone, a critical internal event occurs.

4. Resolution: This "resonance" signifies that an open **Sensation-Behavior Cycle** has suddenly found an efficient path to **Loop Closure**. The resulting sense of "extreme comfort" is precisely the system's release of intense "**positive value evaluation**" (positive Emotion), marking the accidental yet perfect elimination of **Expectancy-Sensation Mismatch**. The entire process is a successful self-calibration completed by the system through fortuitous matching with environmental or thought-memetic elements during open exploration.

Explanation of "Unbidden Inspiration":

- This is not "unbidden" but the peak manifestation of the internal self-organizing capacity of the **Youjue System**. In a

relatively calm state, the system's vast network of **Sensation-Behavior Traces** (memory, knowledge, emotional patterns) continues dynamic collision and combination through spontaneous **Reentry**.

- At a certain moment, this internal activity fortuitously generates a novel **Thought Meme** connection pattern that is highly self-consistent and can trigger strong **positive Valence Sensation**. This evaluation may stem from its potential resolution of some cognitive deviation not yet consciously recognized, or from the fact that its structure itself satisfies deep **Expectancy Sensation** at the **Noetic Stratum** for exploration (**Defensive**) or expressive power (**Offensive**). This precisely proves that creation can transcend problem-solving, arising from the self-enrichment and transcendence of internal sensation patterns within the system.

IV. Unified Generative Logic: A Poem of Life Across Strata

The most stunning insight of *The Outline* lies in its revelation of a unified generative logic running through all levels of life organization: "**Resonance-Evaluation-Consolidation**."

- **At the unicellular level:** Bacteria and other organisms achieve sharing of environmental states through chemical signals (such as quorum sensing molecules) (**Resonance**). If this signal pattern predicts group survival advantage (such as forming a bio-film to resist threats) (**Evaluation**), the corresponding sensing mechanism is consolidated by natural selection and becomes a stable phylogenetic trait (chemical coordination circle).
- **At the neural level:** Neuronal clusters achieve synchronization through **Reentry (Resonance)**. If their activity patterns bring positive systemic value (**Evaluation**), they are selectively consolidated and form specific **Global Brain Functional Clusters** ("neural circle").
- **At the social level:** Individuals produce **Shared Sensation-Behavior** resonance through shared cultural symbols and behavior patterns. If it brings satisfaction such as belonging or status (**Evaluation**), it coalesces into stable social groups ("social circle").
- **At the cognitive level:** **Thought Memes** resonate with an individual's cognitive structure. If they effectively eliminate cognitive unease or provide meaning (**Evaluation**), they are

accepted and propagated, forming scientific paradigms or artistic schools ("cognitive circle").

This logic demonstrates that the growth of mind and the evolution of civilization are not chaotic accumulations but recursive manifestations of the same life-organizing principle at different scales. *The Outline* thereby achieves seamless interpretation from microbial cooperation to civilizational morphology.

V. Summary and Outlook: A Warm Paradigm Return

Compared with the traditional system view represented by "Systemic Psychophysiology," which still carries strong teleological and cybernetic overtones, *Youjue Physiology: An Outline* achieves a thorough paradigm leap:

- **From "Mechanistic Metaphor" to "Life Metaphor":** It no longer treats mind as a machine running on preset programs or pursuing fixed goals, but as a living, warm life process that self-sustains and self-constructs through a stream of sensation.
- **From "Explanatory Dilemma" to "Explanatory Inclusiveness":** It successfully unifies both goal-directed behavior and goalless exploration, problem-driven insight and unbidden inspiration, into the **Sensation-Behavior Cycle** and its

Resonance-Evaluation-Consolidation logic, demonstrating unprecedented theoretical inclusiveness and explanatory elegance.

- **From "Disciplinary Barriers" to "Integration of Life":** It breaks through the fences between physiology, psychology, sociology, and philosophy, using the same language of **Youjue** to depict a continuous landscape of life from pain to faith, from reflex to civilization.

Ultimately, *The Outline* is not only a theoretical revolution but also a transformation of worldview. It invites us to gently yet firmly turn the scientific gaze away from obsessive philosophical speculation about abstract "consciousness" or mechanistic analysis of isolated "behavior," and back toward that entity we are always immersed in yet often overlook — the living life itself that actively engages in sensory dialogue with the world.

It begins with deep listening to that plain expression "I feel...," and ultimately guides us on how to become lucid pilots of our own life stream, and through resonance, move toward a warmer world that more **Youjue Persons** can feel. This, perhaps, is the most precious legacy this masterpiece bequeaths to future science.

From the "Whisper of Bacteria" to the Grand Symphony of Civilization: On the Revolutionary Starting Point of *Youjue Physiology: An Outline*

Youjue Physiology: An Outline, with its grand theoretical ambition, constructs a generative landscape of "**Youjue**" spanning from the flickering of neurons to the epic of civilization. Yet the brushstroke of this magnificent picture does not begin in the depths of cerebral sulci, nor in the haze of introspection, but unexpectedly, yet decisively, falls upon the "quorum sensing" of single-celled organisms under the microscope. This seemingly minor choice of starting point is not an inconsequential biological footnote; it is in fact the most revolutionary cornerstone of the entire theoretical edifice. It marks a profound theoretical turn: from "neurocentrism" or "human exceptionalism," toward a more ancient, more universal principle of life self-organization.

I. The Displacement of the Starting Point: From the "Problem of Consciousness" to the "Meta-Question of Organization"

Traditional mind research, regardless of its path, often takes

for granted complex organisms (especially those with nervous systems) as its object of study. Its central questions, whether "how consciousness emerges" or "how behavior is computed," implicitly carry a presupposition of "neurocentrism." *The Outline* accomplishes a decisive displacement of its starting point. It entrusts the first substantive illustration of its theory to bacteria—without nerves, without a brain, without even a multicellular structure.

The revolutionary nature of this displacement lies in its instantaneous transformation of the research problem domain, from "the peculiar difficulty of complex systems (mind)" to "the universal meta-question of life systems (from simple to complex)." The question is no longer: "How do systems with brains produce consciousness?" but rather: "As a self-sustaining existence, how is the most basic coordination and organization of life possible?" Quorum sensing in single-celled organisms is precisely the most concise, most pure answer to this meta-question.

II. Logic Revealed in "Zero-Degree Subjectivity": The Prototype of Resonance-Evaluation-Consolidation

In the case of bacteria, the theory's three core concepts—"Resonance," "Evaluation," "Consolidation"—manifest in an almost

mathematical prototype, stripped of all veils of subjective experience.

- **Resonance** here is the most primitive physicochemical process: Individual bacteria release and detect the same signaling molecule (such as AHL), and the concentration of molecules in the environment becomes "sensation" data shared by all individuals. When concentration exceeds the threshold, this does not imply any "understanding," but it does mean all individuals synchronously enter a new chemophysiological state. This is a pre-cognitive, pure process of signal cycling, pattern recognition, and coordinated response.
- **Evaluation** here is unrelated to any internal feeling but is defined directly by natural selection in evolutionary history. Bacterial colonies capable of forming biofilms have higher survival rates in the face of antibiotics—this is the highest "value." This "value" is not "felt" but is confirmed and selected by billions of survival competitions themselves.
- **Consolidation** then is the inevitable result of this successful pattern being preserved and replicated within the population through genetic inheritance. Valuable coordination

mechanisms are written into the active blueprint of life (the genome), becoming stable species characteristics.

Here we see a prototype of "**Youjue logic**" without "Youjue."

It eloquently proves that the generative trilogy revealed by *The Outline* is not a byproduct of mind but a deep, stable organizational dynamic path that life follows at the level of information interaction to maintain and expand its own existence. It is a more fundamental internal dynamic of life self-organization than neural activity, than subjective experience.

III. Constructing a Continuum: The Smooth Emergence from Chemical Signals to Civilizational Epic

Taking single-celled organisms as the starting point, its greatest theoretical construction advantage lies in paving a logically smooth, unbroken generative continuum from inanimate matter to human civilization.

1. Evolution of Medium: The medium of signals evolves from chemical molecules in bacteria, to neurotransmitters and hormones in multicellular organisms, then to behavior and emotional expression in animals, and finally to language, symbols, and cultural products in humans. The medium becomes increasingly complex and

abstract, but its function as a carrier of "Sensation-Behavior" runs consistently throughout.

2. Nesting and Upgrading of "Evaluation" Mechanism: At the bacterial level, the "evaluator" is natural selection external to the individual. In the nervous system, **"Evaluation"** is internalized as the brain's value system (such as dopamine circuits). At the social level, **"Evaluation"** is externalized as cultural identity, institutional rewards and punishments, and historical selection. At the cognitive level, **"Evaluation"** is again internalized as the individual's pursuit of logical coherence, aesthetic harmony, and fulfillment of meaning. This is an evolutionary process where **"Evaluation"** mechanisms are continuously internalized, externalized, and re-internalized, forming a multi-layered nesting.

3. Accumulation of "Consolidation" Forms: From genetic consolidation, to consolidation of neural synaptic connections (habits and skills), to consolidation of social relations and institutions (tradition and law), and finally to consolidation of cultural symbols and knowledge systems (canons and paradigms). The products of consolidation at each stratum become the stable platform for the emergence of complexity at the next stratum.

The establishment of this continuum enables *The Outline* to discuss bacterial cooperation, monkey hierarchies, paradigms of scientific communities, and the rise and fall of artistic schools using the same logical language without any awkwardness. It dissolves the customary chasm between the living world and human society, natural science and humanities, unifying them as successive iterations of the same generative algorithm at different levels of complexity.

IV. "Dimension-Reducing" Deconstruction and Inclusiveness of Traditional Paradigms

This revolutionary starting point actually performs a "dimension-reducing" integration of many previous theoretical paradigms.

- **For sociobiology and evolutionary psychology**, it accepts the fundamental role of genes and natural selection but places them under a more basic logic of signal interaction, avoiding the crudeness of "genetic determinism."
- **For neuroscience**, it provides a broader pre-neural evolutionary background and functional logic prototype for its discoveries (such as mirror neurons, value systems).
- **For sociology and humanities**, it provides a solid, non-

reductionist biological and dynamical foundation for their objects of study (institutions, culture, meaning), freeing them from the awkwardness of "floating above the material world."

More importantly, it deconstructs the narrative of human exceptionalism. The sociality, culture, and even consciousness that humans pride themselves on are no longer seen as abrupt miracles in the universe, but as the most complex and brilliant expressions accumulated over billions of years of evolution by life's ancient and powerful self-organizational algorithm. We are not exceptions to the rule, but its pinnacle embodiment.

Conclusion: An Epic That Begins at the Origin and Arrives at Integration

Therefore, *Youjue Physiology: An Outline's* use of single-celled organisms as its starting point is neither accidental nor decorative. It is a deliberate theoretical "Genesis." It begins with the "whisper" of life's most primitive organization, demonstrating to us how that simple law named "**Resonance-Evaluation-Consolidation**", through a long process of evolution and self-construction, can generate infinite complexity from simple repetition, ultimately composing the magnificent symphony of life that includes our own

consciousness and civilization.

The revolutionary nature of this starting point lies in its enabling us to view ourselves with new, humble, yet coherent eyes: We are not lonely thinkers but the most recent, most self-aware chapter in the great epic of life coordination that began in the primordial ocean. And this, perhaps, is the most profound revelation this *Outline* bestows upon us.

Shadow Self-Illumination: On the First-Person Revolution of *Youjue Physiology: An Outline*

In the long odyssey of mind exploration, humanity has always been trapped in a paradoxical predicament: the more meticulously we delineate the contours of consciousness, the more those contours resemble a fleeting shadow. We measure the firing frequencies of neurons, record the stimulus-response curves of behaviorism, construct information-processing models of cognitive science — these efforts themselves are impeccable, yet they consistently describe an "other," an "consciousness" that is objectified, rendered in the third person. What we depict has always been "his shadow," not "my sensation." The emergence of *Youjue Physiology: An Outline* bears its most fundamental subversion precisely here: it accomplishes a fundamental turn from "observation of the other" to "self-illumination," retracting the probe that detects shadows from the external world and pointing it directly at the irreducible "I feel..." within each living being.

The three cornerstones of this turn construct an entirely new theoretical edifice: (1) taking the **Sensation-Behavior Cycle** as the basic unit of analysis, anchoring mind in the living process of life's

self-maintenance rather than static entities; (2) taking **Expectancy Sensation—Expectancy-Sensation Mismatch** as the engine of growth, revealing that from single-celled organisms to civilization, all learning and adaptation share the same set of value-driven algorithms; (3) taking **Resonance-Evaluation-Consolidation** as the cross-stratal unified logic, proving that the synchronization of neuronal clusters, the cohesion of social circles, and the propagation of thought paradigms are in fact emergent expressions of the same life-organizing principle at different scales.

Yet the true revolutionary nature of these three cornerstones lies not in their explanatory power but in their observational perspective — they no longer demand a third-person subject that is omniscient and omnipotent to "scientifically" study some object, but invite every first-person "I" to become the observer, describer, and guide of one's own life shadow. This is a triple transgression of methodology, ontology, and ethics, ultimately pointing toward letting the light of science re-illuminate that warm, agentic, continuously self-constructing entity — living life itself.

I. From "Stimulus-Response" to "I feel...": The Ontological Commitment of the First Person

Traditional physiology depicts "reflex" as an arrow released from a bow: a stimulus necessarily elicits a response. This "stimulus-response" model invisibly fragments the integrity of life activity, reducing the living flow of life to isolated strings of neural firing. It presupposes an external observer calmly recording inputs and outputs, as if life were merely a predictable machine. The first cut of *The Outline* severs this "isolated arrow."

The proposal of the **Sensation-Behavior Cycle** is by no means simple terminological replacement but a displacement at the ontological level. It declares: the foundation of mind is not a passive receptor waiting to be stimulated, but an active closed-loop system that drives behavior through sensation and reshapes sensation through behavioral outcomes. The shortest form of this closed loop is "pain → withdrawal → pain disappearance" when the hand touches something hot; its most magnificent form is civilization's layered accumulation through the cycle of "cognitive unease → scientific exploration → knowledge closure."

The crucial point lies in the irreducibility of this closed loop

in the first person. When I say "I feel pain," this is not merely a data point to be explained but a direct report of **Systemic Sensation**, the verbal output terminal of the **Youjue System**'s self-maintenance activity. The third-person perspective can measure the firing frequency of C-fibers but can never "feel" that pain; whereas the first-person "I feel..." is precisely the key link that completes the closed loop — sensation achieves self-confirmation in language. Therefore, placing "I feel..." at the center of theory is not philosophical compromise but ontological honesty: it acknowledges that any theory of mind that cannot accommodate, or even originate from, this first-person report is building castles in the air.

This turn makes **Youjue Physiology** a self-referential science. Its basic unit is not an "objectively definable variable" but the "stream of Sensation-Behavior" that each living being can directly observe from within. The researcher's task is no longer "to describe the other's shadow" but to teach every "I" how to observe how its own shadow moves with the light.

II. The Genealogy of "Third Person": From Objective Hegemony to Conscientious Resonance

It must be acknowledged that the preceding discussion

commits a fatal oversimplification: equating "third person" with scientific objectivism, as if literature, art, religion, and other third-person perspectives saturated with subjectivity did not exist, or were insignificant to the world. This is a betrayal of the spirit of *The Outline* and a misreading of the nature of knowledge. The true "third person" is a spectrum:

(1) The Third Person of Scientific Objectivism: Obscured Subjectivity

The tragedy of Pavlov's dogs and Skinner's rats lies not in the "objectivity" of the research itself, but in the complete invisibility of the researcher's subjectivity. Those experimental designs — fixed platforms, behavioral deserts, single outputs — are projections of the researcher's extremely strong subjective values ("Science = simplification + quantification + control"). Yet these values are disguised as "objective laws," the animal's subjectivity is stripped away, and its **Youjue System** is violently reduced to a passive receptor. The "laws of conditioned reflex" and "reinforcement theory" obtained are not truths about life but distorted mirror images about "how the shadow of a de-subjectified life responds to external control." This "objectivity" of the third person is in fact the

tyranny of subjectivity, which maintains the purity of the "other" by suppressing the first-person "I."

(2) The Subjective Third Person of Literature and Art: Frank Resonance

Tolstoy writing Anna's despair, Van Gogh painting the swirling stars, the Buddha saying "all sentient beings suffer" — these narrators are all third persons (omniscient perspectives), yet they do not feign objectivity but frankly acknowledge their subjective intervention. Novelists use words to make you "feel" Anna's suffocation, painters use color to make you "re-sense" the night sky as he saw it, religion uses ritual to make you "resonate" with a transcendent existence. The legitimacy of this kind of third person lies precisely in that it does not deny the first-person experience of the recipient but activates it through resonance. The greatness of artistic works lies in their ability to establish transferable Sensation-Behavior patterns between different first persons. This is precisely the **Thought Meme** propagation that *The Outline* highly values — subjectivity, when frankly admitted, achieves genuine intersubjective connection.

(3) The Intersubjective Third Person of *The Outline*: Conscientious Resonance

The true revolution of *The Outline* is to propose a third possibility: "an intersubjective third person based on first-person conscientiousness." When I say "the C-fiber discharge mechanism of pain," I am not describing an object unrelated to you but saying: "When you feel pain and report it with 'I feel...'", my framework can help you observe that this is your innate reflexive loop driven by **Expectancy-Sensation Mismatch** after your Defensive expectancy is violated." This statement appears third-person (involving physiological mechanisms), but its validity depends on your first-person verification. It is not "I tell you the objective truth" but "I provide a language that allows you to observe your own shadow more clearly."

The perspective shift completes here: science, art, and religion are no longer divided into opposing camps of "objective" versus "subjective" but are repositioned as "different ways of conscientious projection of subjectivity." Their merit does not lie in who is closer to "objectivity" but in who can better promote sustainable, mutually nourishing resonance cycles between projector and

projected.

III. Dissection of "Subjectivity" in Scientific Methods: The "Youjue" Diagnosis of Pavlov and Skinner

Using the framework of *The Outline* to dissect those two classic experiments, their "subjectivity" becomes nowhere to hide:

Pavlov's Dog: Behind the researcher's "objectivity" lies the subjective choice of an extremely unnatural situation. The dog's **Youjue System** is deprived of the right to execute complete cycles (sniffing, approach-avoidance, decision-making), only able to output saliva. The "law of conditioned reflex" obtained is a distorted mirror image of the researcher's subjective values (control-quantification priority) projected onto a de-subjectified life. This is not "objective truth" but "the law of how a prisoner's shadow swings with the metronome."

Skinner's Rat: The "objectivity" of the experiment is built upon a subjectively designed behavioral desert. The rat's **Three-Dimensional Dynamic Taxonomy** is frozen: **Defensive** only for "avoiding electric shock," **Offensive** only for "obtaining food pellets," **Friendly** completely deactivated. The "reinforcement theory" obtained is hierarchical misalignment knowledge projected by the

researcher's subjective values (control priority) onto an imprisoned life. It explains how external reinforcement shapes shadows but turns a deaf ear to how free life actively explores, resonates, and creates.

Conclusion: The "objectivity" of these experiments is the tyranny of the researcher's subjectivity, which maintains the purity of the researcher's self-model by suppressing the animal's first-person conscientiousness. The "laws" obtained are laws about "de-subjectified life," not life itself. Consider, for instance, that whether in Pavlov's dogs or Skinner's rats, the entire experimental logic of "re-activity" and "activity" is rooted in an unspoken premise: they must be maintained in an artificial, perpetual state of hunger. Once satiated, this carefully constructed edifice of "laws" loses its most foundational bricks.

IV. "Resonance-Evaluation-Consolidation": The Self-Organizing Logic Across Strata

When **Sensation-Behavior Cycles** operate in parallel across countless individuals and strata, how do complex structures emerge? The third cornerstone of *The Outline* pushes open three doors—neural, social, cognitive—to reveal the same hall behind them:

Resonance-Evaluation-Consolidation.

Resonance is the joy of pattern matching. At the neural level, it is the synchronization of functional clusters facilitated by **Reentry**; at the social level, it is the mutual activation of **Shared Sensation-Behavior Patterns**; at the cognitive level, it is the alignment of **Thought Memes** with internal structures. The essence of resonance is the overlap in frequency between "I feel..." and "you feel..."

Evaluation is the adjudication of **Valence Sensation**. That diffuse "good" or "bad" is the ontological assessment by the life system of "whether this pattern aids my existence." Dopamine release is **positive Evaluation** of "expectancy fulfilled"; warmth of belonging is **positive Evaluation** of "social resonance"; the ecstasy of insight is **positive Evaluation** of "cognitive loop closure." Evaluation elevates random collision to teleological selection.

Consolidation is the precipitation of traces. Patterns selected by **positive Evaluation** leave persistent **Sensation-Behavior Traces** in neural structures, social relations, and cultural paradigms, becoming the starting point for new cycles. A neuronal cluster, a family ritual, a scientific theory—all are thus formed.

The cross-stratal unity of this logic only reveals its complete meaning from a first-person perspective. When I learn piano, my brain clusters undergo **Resonance-Evaluation-Consolidation**; when I join a band, our shared sense of rhythm undergoes **Resonance-Evaluation-Consolidation**; when our style becomes a school, that "unique signature" undergoes **Resonance-Evaluation-Consolidation** in the larger community. Three processes are merely the self-replication and expansion of "my" cycle at different scales. The third person sees "neural plasticity," "social identification," "cultural inheritance"; the first person directly experiences that they share the same internal logic of "I feel it's right, so it stays."

V. The Resonance of First and Third Person: From "I Feel" to "We Feel"

The deepest ambition of *The Outline* is to dissolve the traditional subject-object dualism and construct intersubjectivity based on first-person conscientiousness. It no longer attempts to translate first-person "subjective experience" with third-person "objective language" but acknowledges that both are simply different perspectives on the same life process and seeks a common language that can resonate.

The path to resonance begins with first-person conscientiousness. When I learn to anchor my cycles with "I feel..." interpret growth through **Expectancy-Sensation Mismatch**, and understand habit formation through **Resonance-Evaluation-Consolidation**, I become a lucid observer of my own life. I no longer view "pain" as a signal to be endured but interpret it as a system report of "Defensive expectancy violated"; I no longer see "anger" as an out-of-control emotion but identify it as a regulatory signal of "Offensive loop blocked."

This first-person conscientiousness then leads to third-person understanding. When I understand "my resonance mechanism," I understand "your behavior" — no longer labeling "a bird pecking" as "aggressive" but resonating with the **Defensive** dynamics of "guarding its nest" behind it; no longer interpreting "a colleague's silence" as "indifference" but imagining the possible internal experience of "status anxiety" or "cognitive mismatch."

This external simulation based on self-experience is precisely the neural basis of empathy (mirror mechanism) interpreted in first-person terms. It is not "I guess what you're thinking" but "based on my Sensation-Behavior experience, I re-sense your possible state,

and stand ready to be corrected by you."

Ultimately, first-person and third-person reconcile in **Youjue Ecology**. In medicine, the doctor is "the container of the patient's 'I feel...'" ; in education, the teacher is "the resonance amplifier of the student's 'I feel I understand'" ; in human-machine collaboration, AI is "the auxiliary calibrator of human expectancy and mismatch." Science, art, and religion shift from being bystanders of shadows to practices of open resonance.

VI. Projection and Resonance: From "Petty Person's Heart" to "Gentleman's Aspiration"

All knowledge is the projection of "I feel...." The key lies in whether the projection posture is closed or open:

Closed projection (petty person's heart): Refuses **Expectancy-Sensation Mismatch**, forcibly assimilating the external into preset frameworks, is the consolidation of traumatic closed loops. It suppresses feedback, maintains prejudice, and is systemic pathology.

Open projection (gentleman's aspiration): Actively seeks mismatch, allowing frameworks to be continuously reshaped by external reality through **Resonance-Evaluation-Consolidation**. It

embraces perplexity, viewing it as fuel for growth, and is systemic health.

The diagnosis of *The Outline*:

- The "objectivity" of Pavlov and Skinner is the closed projection of the researcher's subjective values (control-quantification priority), which strips animals of their first-person to maintain the purity of the researcher's self-model.
- The "subjectivity" of Tolstoy and Van Gogh is the open projection of creators' subjective experience (understanding-resonance priority), which invites activation of the recipient's first-person to enrich both parties' Sensation-Behavior pattern repositories.
- The framework of *The Outline* is conscientious subjective projection ("letting science embrace life"), providing a set of linguistic tools that allow every "I" to both observe one's own shadow and calibrate resonance with others.

The practice of becoming a Youjue Person:

- When I say "I feel you are...", I ask: "Is this my projection or resonance? Is my Systemic Sensation open (curious) or closed (certain)?"

- Actively seek mismatch: Engage with people and things that "don't make sense," transforming "petty person" tendencies into opportunities to "enrich the pattern repository."
- Anchor to deep values: In chaos, return to the three basic tensions — is this behavior guarding, acquiring, or connecting? This can break through the fog of acquired prejudice.

VII. Conclusion: Shadow Self-Illumination, Coexisting with Resonance

The ultimate ambition of *The Outline* is not to replace the third person with the first but to make all third persons conscientiously aware that they are projections of the first person. Science does not disappear but transforms from closed objective hegemony to open resonant practice; art does not walk alone but becomes a catalyst for resonance; religion does not dictate but becomes the guardian of deep value anchors.

From Robert Whytte's **Youjue Principle**, to Ivan Sechenov's **Systemic Sensation**, to Edelman's **Neural Darwinism**, *The Outline* completes the final leap: letting life shift from being an observed object to becoming the subject that observes itself, guides itself, and resonates with all things.

The shadow still exists, but is no longer a confusing phantom. Because we have learned to see, within the shadow, the self that is observing the shadow — that fresh, agentic, warm **Youjue Person**. When countless **Youjue Persons** connect through resonance, **Youjue Ecology** naturally emerges. Here, science is a searchlight for life's self-guidance, society is a resonance field for **Shared Sensation-Behavior Patterns**, and civilization is a river of meaning sedimented by countless "I feel..." over time.

May every "I" become a lucid observer of its own shadow; may every "you" understand "my" internal tension through resonance; may "we" jointly weave a **Youjue world** that is no longer torn, needs no arbitration, and requires only resonance.

Between "I Feel" and "We Coexist": The Civilizational Revelation of *Youjue Physiology: An Outline*

The true value of *Youjue Physiology: An Outline* does not lie in the amount of new experimental data it provides, but in its guardianship and elucidation of the most fundamental fact: every life is a **Youjue System** capable of self-report, self-evaluation, and self-guidance. This sounds nearly like a philosophical assertion, yet it reveals the hardest-core physiological truth of life — mind is not a mysterious ghost but the living process through which an organism maintains its existence via the **Sensation-Behavior Cycle**.

I. "I Feel": The Evidentiality of the First Person as the Starting Point of Survival, Not a Philosophical Luxury

The everyday expression "I feel," within the framework of *The Outline*, gains a solid physiological positioning. It is not fuzzy subjective chatter but the direct output of **Systemic Sensation**. When a person says "I feel lonely," this is not merely a literary metaphor for some neurotransmitter deficiency but a direct systemic alarm triggered by the deviation of their **Social-Friendly** tension. This statement is ontologically prior to any fMRI scan or blood test data.

This is precisely the subversiveness of *The Outline*: it inverts the traditional scientific hierarchy of explanation. The old paradigm tends to say: "You feel lonely because your oxytocin levels are low." *The Outline* points out: "You feel lonely because the **Sensation-Behavior Cycle** of your belonging has failed to achieve **Loop Closure**; and low oxytocin levels are merely one of the physiological traces of this closed-loop failure." Here, sensation is no longer a secondary epiphenomenon of neural mechanisms; mechanisms are instead one way for sensation to be realized.

This inversion contains profound ethical significance: it defends the non-negotiable nature of individual experience. No third-person "objective data" — whether a doctor's imaging report or society's macro-statistics — has the right to nullify the evidentiality of a person's first-person experience. "I feel" is a sovereignty of survival, the most original, most authentic report of a life system's self-regulation.

II. Dynamic Boundaries: Individual and System in the Allocation of Nine-Category Concentrations

The **Three-Dimensional Dynamic Taxonomy of Youjue Sensation** proposed by *The Outline* depicts a picture of life forces

fluctuating in real time across nine basic categories. This does not preach a license for unfettered free will but reveals a lucid reality: the individual is a dynamic system with permeable boundaries, and its "Youjue concentration" mix is an adaptive optimum formed through continuous evaluation of internal and external tensions.

Take the reclusive Diogenes as an example. If he attempted to only turn up **Noetic-Offensive** (such as pure independent thinking) without correspondingly elevating **Vital-Friendly** (such as fusion with natural rhythms) or **Social-Offensive** (such as gaining recognition in an intellectual community), then his suppressed **Vital-Defensive** tension (such as hunger, cold, danger) would eventually force his system to roll back with powerful "negative pulses" — either returning to society or collapsing. Therefore, the self-allocation of a **Youjue Person** is essentially a lucid choice: what dynamic mix at this time and place can make my system most stable, most vital, and best able to achieve sustainable self-continuation? Loneliness is a high-energy-consumption survival formula; it demands extremely high internal order to compensate for the lack of external resonance.

III. Systemic Cancer: When "Friendly" is Alienated into an Exclusive Barrier

The history of Nazi Germany provides a civilization-scale heavy verification for the theory of *The Outline*. It demonstrates the fatal pathology triggered when **Friendly tension** is anchored to an exclusive definition.

In the short term, the Nazi system seemed to achieve extremely efficient **Loop Closure**: a twisted "sense of belonging" (limited within Aryans), peak **Defensive** (viewing Jews as existential threats), and predatory **Offensive** (Lebensraum) combined to produce powerful internal positive feedback, systematically suppressing **Expectancy-Sensation Mismatch**. However, from the perspective of *The Outline*, this was not healthy closed-loop completion but **systemic "cancer."** It rigidified the system's boundaries completely, refusing exchange of thought, emotion, and value with the external world, causing systemic entropy to increase explosively.

This thoroughly betrayed the essence of **Friendly** — true rhythmic fusion requires boundaries to be permeable, not isolating walls. A closed system that refuses to resonate with broader systems faces collapse as a dynamical inevitability. The establishment of

international governance systems such as the UN after the war can be seen as a stratal leap of **Friendly tension** on a larger spatiotemporal scale: expanding the category of "we" from blood-based ethnicity to humanity as a whole, elevating the foundation of fusion from biological commonality to shared jurisprudence and values. This was not only a moral victory but also a process where the larger life system (human civilization), to maintain its own survival, performed **Expectancy-Sensation Mismatch clearance** and **Loop Reconstruction** on a cancerous subsystem.

IV. Civilization as Metabolic Product: The Survival Necessity of the Meaning Dimension

The profound inspiration of *The Outline* is that when life activities ascend to the social and cognitive strata, pure biochemical intervention touches the limits of its explanatory power. Medication may alleviate the physiological symptoms of depression but cannot directly endow a person with the sense of belonging of "being understood." Because belonging is an event of "inter-systemic resonance," the co-manifestation in spacetime of "I feel accepted" and "we feel you belong to us." This is a relational problem, not a purely synaptic one.

This reveals a potential crisis of modern civilization: **meaning malnutrition**. We teach the knowledge of neuroscience but may not necessarily teach people how to use it to construct the cognitive closed loop of "I feel the world is understandable"; we lecture on art history but may overlook guiding people to experience the expressive impulse of "I feel life is beautiful"; we critique religion but sometimes fail to comprehend that "I feel existence is mysterious" as a civilizational value of deep human experience. Science, art, and religion, in the vision of *The Outline*, are by no means dispensable ornaments; they are indispensable "metabolic products" at the **Social** and **Noetic Strata**. Depriving the nourishment of these civilizational achievements may cause degenerative distortion in the dynamic mix of the human **Youjue System** — **Defensive** degenerates into suspicion, **Offensive** into greed, **Friendly** into narrow tribalism.

V. Becoming a Youjue Person: Between Guarding Self and Open Resonance

Therefore, *The Outline* ultimately points to a life practice, an art of lucid living:

1. Firmly Guard the Evidentiality of "I Feel"

This is not self-centeredness but the refusal to cede the legitimacy of individual experience to any external system (scientific, social, market). When told "your pain doesn't show on scans, so it's false," one can respond: "No, this is my system sounding an alarm; your data cannot cancel my sensation."

2. Actively Maintain Openness to Resonance

This is not drifting with the current but consciously using the essence of human civilization as nourishment for self-construction. Engage with science to cultivate the cognitive closed loop of "I feel the world is orderly"; immerse in literature and art to deepen the empathy of "I feel human nature is profound"; participate in community to nourish the connection of "I feel I belong."

3. Constantly Be Vigilant Against the Alienation of Practice

At the individual level, avoid letting "I feel" solidify into a solipsistic barrier that refuses dialogue; at the collective level, prevent "we feel" from degenerating into a closed loop that suppresses dissent. The lesson of Nazism is a warning close at hand: any collective identity built on exclusive definitions, no matter how efficient and powerful in the short term, will eventually face reckoning

in the logic of larger-scale systems.

VI. Conclusion: *The Outline* as a Civilizational Self-Rescue Guide

Youjue Physiology: An Outline transcends the category of traditional physiology textbooks. It is more like a diagnosis written to modern civilization, also a self-rescue guide grounded in life itself. In an era prone to atomizing, mechanizing, and nihilizing people, it issues a clear and warm appeal: go forth and resonate actively, transform the spiritual achievements accumulated in human history into rich metabolic nourishment for your own system, and thereby become a **Youjue Person** who lucidly observes one's own stream of sensation, agentially modulates life dynamics, and warmly merges into the net of coexistence.

Its greatest explanatory power lies not only in its ability to sort out the past but in its capacity to illuminate the path ahead — guiding every life on how to find that dynamic yet solid balance between the truth of "I feel" and the integrity of "we coexist."

Learned Expectancy Sensation: The Stream of Life Experience Precipitated within the Innate Value Gravitational Field

In the generative epic of the **Youjue System** portrayed by *Youjue Physiology: An Outline*, **Learned Expectancy Sensation** occupies a pivotal, node-connecting position. It is neither a rigid command carved by genes nor a random doodle of experience, but a dynamically flowing guide of sensory experience precipitated by an individual life's unique **Sensation-Behavior Traces** within the **innate value gravitational field** hammered out over billions of years of evolution. Grasping its formation mechanism is the key to understanding how **Youjue** progresses from the closed loops of innate reflexes to the open creation of intelligent life.

I. Conceptual Definition: From the "Innate Value Anchor" to the "Individualized Expectancy Network"

The Outline explicitly locates **Expectancy Sensation** within a continuous spectrum from phylogeny to ontogeny. **Innate Expectancy Sensation** is the life baseline written into genes by evolution — the preset ranges for homeostatic parameters, the balance baselines of the three basic tensions, and the initial expectations for

regularity. It constitutes the deep value anchor of **Youjue**, determining which sensation deviations are "important and urgent" (such as pain taking priority over mild itching).

Learned Expectancy Sensation, in contrast, is "the prediction of specific objects and situations that an individual forms through **Reentry** and learning based on **Sensation-Behavior Traces** accumulated across its life history". It is not a simple copy of innate expectancy but performs fine depiction and filling on the value blueprint outlined by innate expectancy. The learned expectancy that "this stone can be used to crack nuts" is grounded in the higher-order realization of the innate **Offensive** expectancy of "energy acquisition"; the judgment that "this person's shifty eyes may indicate dishonesty" is the result of refining innate **Defensive** vigilance into a social context.

Therefore, the essence of **Learned Expectancy Sensation** is a dynamically fluid expectancy network constructed from **Sensation-Behavior Traces**, which enables the organism to predict "approximately how high this staircase is" or "how this negotiation might unfold," thereby achieving more efficient and adaptive life flow orientation in specific contexts.

II. Formation Mechanism: The "Mismatch-Correction" Spiral under Value Guidance

The formation of **Learned Expectancy Sensation** follows a precise four-stage generative chain, where "strategy" refers only to the behavioral level, while expectancy itself always exists as a "sensory guide":

(1) Innate Value Gravitational Field: Setting the Direction and Boundaries of Learning

The starting point of all learned learning is the "value legislation" function established by **Innate Expectancy Sensation**. This legislation does not dictate "what to learn" but "why to learn." When an infant's grasping action successfully reaches a toy, satisfying the **Noetic-Defensive** motivation (eliminating environmental uncertainty) through the completion of a **Vital-Offensive** action, and thereby alleviates the developmental needs set by innate expectancy, the positive **Evaluative Sensation** released by the value system empowers this **Sensation-Behavior pattern**, granting its trace prioritized consolidation rights. While Hebbian plasticity describes the nervous system's potential to record co-activation, **Valence Sensation** is the arbiter that endows it with biological meaning and

determines whether its trace can be retained long-term.

(2) Expectancy-Sensation Mismatch: Multi-Level Prediction Error Signals

The core engine driving the continuous refinement of **Learned Expectancy Sensation** is **Expectancy-Sensation Mismatch** — the identifiable conflict between Immediate Sensation and **Expectancy Sensation**. This mismatch contains three levels of correction:

1. Crude Learned Expectancy vs. Immediate Sensation:

This is the primary correction scenario. When a micro-engraving artist makes the first cut, their expectancy for "jade hardness" is vague; when the burin meets resistance (Immediate Sensation), a mismatch occurs, driving the motor system to adjust force. After countless "mismatch-correction" iterations, their sensation network precipitates into precise "feel."

2. Learned Expectancy vs. Innate Expectancy: When a specific situational learned expectancy violently conflicts with deep innate expectancy (such as a long-term dieter forcibly suppressing the learned expectancy for "hunger sensation" while innate expectancy continuously sends energy alerts), a "value-level mismatch" occurs, forcing the system to re-evaluate the survival utility of that

learned expectancy, potentially leading to its weakening or reorganization.

3. Immediate Sensation vs. Innate Expectancy: Although this belongs to the original mismatch at the level of **Proto-Sensation** (such as pain violating "boundary integrity" expectancy), it indirectly provides a stable reference frame for learned learning by continuously reinforcing the authority of the innate value framework.

This multi-source mismatch mechanism ensures that learned expectancy can be continuously micro-engraved in specific tasks while also achieving macro-restructuring during fundamental value conflicts.

(3) Value-Dependent Selection: The "Empowerment Valve" for Trace Consolidation

Mismatch only marks "needs adjustment," but whether a trace can upgrade from a "temporary model" to a "stable expectancy" depends on the mechanism of **Value-Dependent Selection**. When a **Sensation-Behavior Cycle** successfully eliminates mismatch and achieves **Loop Closure**, the system generates a positive **Evaluative Sensation** (such as satisfaction). This value signal originating from

the depths of life non-specifically enhances the connections between neuronal clusters that are co-activated during the operation of that cycle, making its trace "particularly deep and lasting." Conversely, if the cycle fails (mismatch persists) and lacks value empowerment, the trace is like "footprints on sand, quickly erased by the tide of time".

This mechanism firmly anchors the formation of **Learned Expectancy Sensation** in the value logic of "survival of the fittest": only **Sensation-Behavior patterns** that can effectively serve the approach of innate expectancy can have their carried expectancy information precipitate into the individual network.

(4) The Remembered Present: The "Crucible" for Fusing Old and New Information

The Outline emphasizes that "memory is not static storage of information but **Sensation-Behavior Traces** left by past **Sensation-Behavior Cycles** on neural structures. Recall is not the simple re-activation of these traces but the system's 're-sensation' of past sensory experience based on these traces". **The Remembered Present** is not an independent process but describes the dynamic generative mechanism of **Learned Expectancy Sensation** in real-time

operation. The so-called **Learned Expectancy Sensation** is precisely the system's internal simulation of "imminent reality" based on past traces, a process that is itself "re-sensation of traces."

The **Reentry** mechanism ensures that this "re-sensation" can continuously dialogue, compare, and calibrate with Immediate Sensation, completing fusion and updating within **The Remembered Present**. Every new experience reshapes the precision and predictive range of **Learned Expectancy Sensation**, evolving it from "diffuse creative impulse" to "precise causal prediction."

III. Functional Characteristics: Precision, Contextualization, Fluidity

Through the above mechanisms, **Learned Expectancy Sensation** exhibits three core characteristics:

1. Precision: From an infant's vague expectancy that "objects can be grasped" to a pianist's exquisite discrimination of "the tactile difference of each key," learned expectancy pushes predictive accuracy to the extreme through countless iterations of "mismatch-correction."

2. Contextualization: The same innate hunger drive can generate completely different **Learned Expectancy Sensations** in

different contexts — "go to the fridge for food," "order takeout," "endure until dinner" — demonstrating high adaptation to specific environments.

3. Fluidity: Learned expectancy is not immutable. When the environment changes dramatically or value evaluation shifts (such as after a change in health concepts, the learned expectancy for "deliciousness" may be replaced by the expectancy for "healthy"), the original expectancy can be weakened, reorganized, or even eliminated, maintaining dynamic updating of the network.

IV. Strata Expression: Expansion from Vital to Noetic

The power of **Learned Expectancy Sensation** lies in its cross-stratal reconstruction of the entire mental universe:

- **Vital Stratum:** The micro-engraving artist's remarkable "feel" is the peak embodiment of their motor system's extreme **Learned Expectancy Sensation** for force, angle, and material texture, repeatedly driven by countless tiny **Expectancy-Sensation Mismatches** under the traction of "pursuing operational perfection" (serving the innate **Defensive** expectancy for sense of control and efficacy).
- **Social Stratum:** The judgment that "this person's shifty eyes

may indicate dishonesty" is the result of socializing and refining innate **Defensive** vigilance; while the expectancy that "saying 'I love you' will bring intimacy" is a connective expectancy internalized by **Friendly** tension in the relational field.

- **Noetic Stratum:** The scientist's firm conviction that "this direction will ultimately lead to truth" is the "sense of certainty" formed by **Noetic Learned Expectancy Sensation** under value guidance, which drives long-term exploration until the **Loop Closure** moment when "expectancy perfectly matches reality" during insight.

V. Becoming a Youjue Person: Practical Significance

Understanding the formation of **Learned Expectancy Sensation** provides an operational path for self-guidance:

1. Self-Diagnosis: When trapped in cognitive bias of "I thought," one can trace which stratum's learned expectancy is too rigid and fails to respond to new **Expectancy-Sensation Mismatch**.

2. Deliberate Practice: The essence of any skill refinement (language, musical instrument, social interaction) is to design **Mismatch-Correction** cycles through which **Valuation** continuously empowers correct traces.

3. Trauma Repair: Psychological trauma can be seen as the excessive consolidation of "traumatic learned expectancy." The key to healing lies in creating new safe experiences that generate **positive Evaluation**, gradually loosening the dominance of old expectancy networks.

VI. Conclusion: The Adaptive Poem of Life

Learned Expectancy Sensation is an adaptive poem that the **Youjue System** writes to the environment. It uses innate values as rhymes, **Expectancy-Sensation Mismatch** as rhythm, **Value-Dependent Selection** as meter, and continuously revises itself within **The Remembered Present**. It transforms life from a slave of genes into a creator of experience; from a passive responder to the environment into an active predictor of the future. As *The Outline* states, the "growth" of life is precisely the magnificent epic wherein its intrinsic expectancy spectrum — from rigid evolutionary presets to fluid individual wisdom — continuously enriches, calibrates, and realizes itself. Becoming a **Youjue Person** is precisely becoming the lucid author of this epic — that life pilot who can perceive the composition of one's own expectancy network and wisely guide its flow.

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