Tea Effect Analysis Systems: QI Profile vs Atomic Mood Analysis

A Comparative Study of Traditional and Modern Tea Effect Analysis

Introduction

In the study of tea's effects on human experience, two distinct analytical frameworks have emerged: the QI Profile Analysis System and the Atomic Mood Analysis System. While both aim to understand tea's influence on human consciousness and physiology, they approach this goal from different philosophical and methodological perspectives.

Core Philosophical Differences

QI Profile Analysis

Rooted in traditional Chinese medicine and tea culture, the QI Profile Analysis system views tea's effects through the lens of energetic movement and transformation. This system:

- Emphasizes the directional flow of energy (上下升降, up-down movement)
- Considers the temporal progression of effects
- Focuses on bodily regions and their interconnections
- Views effects as transformative processes rather than static states

Atomic Mood Analysis

Drawing from modern psychological and neurochemical understanding, the Atomic Mood system approaches tea effects as discrete, measurable emotional and mental states. This system:

- Breaks down effects into fundamental mood components
- Focuses on psychological and emotional states
- Emphasizes the interaction between different mood aspects
- Views effects as combinations of basic emotional elements

Analytical Parameters

QI Profile Parameters

1. Temperature Nature (性質)

- **Warming** (溫): Outward-moving, activating energy
- **Cooling** (涼): Inward-moving, concentrating energy
- **Neutral** (平): Balancing, harmonizing energy

2. Movement Patterns (氣機)

- **Rising** (升): Upward-moving energy
- **Sinking** (降): Downward-moving energy
- **Circulating** (環): Full-body movement
- **Centering** (中): Gathering at core

3. Depth Levels (深度)

- **Surface** (表): Immediate, external effects
- **Middle** (中): Intermediate bodily effects
- **Deep** (深): Core, fundamental effects

4. Temporal Progression (時序)

- **Initial Phase** (初): First contact effects
- **Development** (展): Main expression
- **Completion** (終): Lasting influence

Atomic Mood Parameters

1. Primary States

- **Energy States**: Energizing, Invigorating
- **Calming States**: Calming, Serene
- **Mental States**: Focusing, Contemplative
- **Comfort States**: Cozy, Warming

2. Interaction Types

- **Complementary**: States that enhance each other
- **Modulating**: States that modify each other
- **Balancing**: States that create equilibrium

3. Intensity Levels

- **Subtle**: Background influence
- **Moderate**: Clear presence
- **Strong**: Dominant effect

4. Duration Types

- **Quick**: Short-term effects
- **Sustained**: Medium-term effects
- **Enduring**: Long-term effects

Measurement Approaches

QI Profile Measurements

Base Calculations

1. **Temperature Score** (溫涼度)
    - Tea type base value
    - Processing method influence
    - Compound ratio effect
2. **Movement Pattern** (氣動)
    - Processing influence
    - Tea type characteristics
    - Compound interaction
3. **Depth Impact** (深度)
    - Age and processing
    - Compound levels
    - Traditional categorization

Atomic Mood Measurements

Core Calculations

1. **Mood State Intensity**
    - Compound levels
    - Processing impact
    - Flavor correlation
2. **Interaction Strength**
    - State compatibility
    - Temporal alignment
    - Intensity balance
3. **Overall Profile**
    - Primary state dominance
    - Secondary state influence
    - State interaction effects

Traditional Wisdom Integration

QI Profile Traditional Elements

1. Five Phase Theory (五行)

- **Wood** (木): Rising, expanding
- **Fire** (火): Warming, transforming
- **Earth** (土): Centering, grounding

- **Metal** (金): Clarifying, condensing
- **Water** (水): Sinking, nourishing

2. Yin-Yang Balance (陰陽)

- **Yang Aspects**: Warming, rising, activating
- **Yin Aspects**: Cooling, sinking, calming
- **Balance States**: Harmonizing, regulating

Atomic Mood Traditional Elements

1. Traditional Effects (功效)

- **Lifting Spirit** (提神): Energy states
- **Calming Mind** (安神): Calming states
- **Focusing Thoughts** (凝神): Mental states
- **Harmonizing Body** (和體): Comfort states

2. Classical Tea Properties

- **Clarity** (清): Mental effects
- **Tranquility** (靜): Emotional effects
- **Vitality** (活): Physical effects

Practical Applications

QI Profile Applications

1. Traditional Health Alignment

- Matching tea effects to constitution
- Seasonal adaptation
- Daily rhythm coordination

2. Meditation Support

- Energy flow awareness
- Body-mind integration
- Spiritual practice enhancement

Atomic Mood Applications

1. Modern Lifestyle Integration

- Productivity enhancement
- Stress management
- Social interaction support

2. Emotional Regulation

- Mood management
- Mental state optimization
- Focus enhancement

Comparative Strengths

QI Profile Strengths

1. **Holistic Integration**
    - Full body-mind consideration
    - Temporal progression understanding
    - Energy movement mapping
2. **Traditional Alignment**
    - Classical theory integration
    - Historical wisdom application
    - Cultural context preservation

Atomic Mood Strengths

1. **Analytical Precision**
    - Specific state identification
    - Clear effect categorization
    - Measurable outcomes
2. **Modern Integration**
    - Contemporary psychology alignment
    - Scientific framework compatibility
    - Practical application focus

Synthesis and Complementarity

Unified Understanding

Both systems offer valuable perspectives on tea's effects:

1. **Complementary Insights**
    - QI profiles provide energetic movement understanding
    - Atomic moods offer specific state analysis
    - Combined analysis enables fuller understanding
2. **Practical Integration**
    - Traditional wisdom application
    - Modern analytical precision

- Comprehensive effect mapping

Future Development

The integration of both systems suggests future directions:

1. **Research Opportunities**
    - Correlation studies
    - Effect validation
    - Measurement refinement
2. **Application Development**
    - Personalized recommendations
    - Effect optimization
    - Cultural preservation

Conclusion

The QI Profile and Atomic Mood systems represent complementary approaches to understanding tea's effects. While the QI Profile system excels in mapping energetic movements and traditional wisdom, the Atomic Mood system provides precise state analysis and modern integration. Together, they offer a comprehensive framework for understanding tea's influence on human experience, bridging ancient wisdom with contemporary understanding.

Tea QI Profile Analyzer

Overview

The Tea QI Profile Analyzer is a web-based tool that analyzes and visualizes the energetic properties (QI) of teas based on their characteristics, processing methods, and compound levels. It combines traditional Chinese tea wisdom with modern analytical methods to provide insights into how different teas affect body and mind.

Features

- Interactive tea selection interface
- Detailed QI profile analysis
- Temperature balance visualization
- Energy progression timeline
- Mental effects mapping
- Comprehensive QI characteristics display

Installation

Prerequisites

- A modern web browser
- A local web server (for development)

Setup

1. Clone the repository:

```
git clone [repository-url]
cd tea-qi-analyzer
```

2. Start a local server. You can use Python's built-in server:

```
# Python 3
python -m http.server 8000

# Python 2
python -m SimpleHTTPServer 8000
```

3. Open your browser and navigate to:

```
http://localhost:8000
```

Project Structure

```
tea-qi-analyzer/
├── index.html              # Main interface
├── qiCalculator.js         # QI calculation logic
├── qiParameters.js         # QI characteristics definitions
├── database.js            # Tea database
└── styles/
    └── main.css           # Styling (included in index.html)
```

Core Components

QI Calculator

The QI calculator processes multiple aspects of each tea:

- Base tea type characteristics
- Processing method effects
- Compound ratios (L-Theanine/Caffeine)
- Energy movement patterns
- Temperature balance

Parameter Definitions

Defines the characteristics and weights for:

- Processing methods
- Tea type base properties
- Compound effects
- Energy patterns
- Temperature influences

Tea Database

Contains structured data for each tea:

- Basic information
- Processing methods
- Compound levels
- Origin details

Usage

Basic Usage

1. Select a tea type from the dropdown menu
2. View the comprehensive QI profile analysis
3. Explore different aspects:
    - Temperature balance
    - Energy characteristics
    - Mental effects
    - QI progression

Understanding Results

Temperature Balance

- **Warming**: Indicates outward-moving, activating energy
- **Cooling**: Indicates inward-moving, calming energy
- **Neutral**: Indicates balanced, harmonizing energy

Intensity Scale (1-10)

- 1-3: Subtle effects
- 4-6: Moderate effects
- 7-10: Strong effects

QI Progression

Shows the development of effects over time:

- Initial Phase
- Peak Phase
- Finish Phase

API Reference

QiCalculator Class

```
const calculator = new QiCalculator(tea);
const qiProfile = calculator.calculate();
```

Methods

- `calculate()`: Returns complete QI profile
- `calculateTemperatureBalance()`: Analyzes warming/cooling balance
- `determineEnergyFlow()`: Analyzes energy movement patterns
- `generateProgression()`: Creates timeline of effects

Return Object Structure

```
{
    summary: string,
    intensity: number,
    category: string,
    bodyFocus: string,
    mentalEffects: string[],
    characteristics: string[],
    progression: {
        initial: string[],
        peak: string[],
        finish: string[]
    },
    temperatureBalance: {
        warmingScore: number,
        coolingScore: number,
        warmingPercent: number,
        coolingPercent: number
    },
    energyFlow: string,
    duration: string,
    peakTiming: string,
    detailedDescription: string
}
```

Contributing

Adding New Teas

1. Update `database.js` with new tea entries
2. Follow the existing data structure:

```
{
    name: string,
    type: string,
    processingMethods: string[],
    lTheanineLevel?: number,
    caffeineLevel?: number,
    // ... other properties
}
```

Modifying QI Parameters

1. Update `qiParameters.js` for changes to:
    - Processing effects
    - Tea type characteristics
    - Compound ratio effects
    - Energy patterns

Cultural Context

This tool is based on traditional Chinese tea wisdom regarding QI (氣), the vital energy or life force. While it provides quantitative analysis, remember that tea's effects are deeply personal and contextual. The measurements serve as guidelines rather than absolute determinations.

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Acknowledgments

- Traditional Chinese tea culture and wisdom
- Modern tea research and analysis methods
- Contributors and maintainers

Version History

- 1.0.0: Initial release
    - Basic QI profile analysis
    - Temperature balance visualization
    - Energy progression tracking

Tea QI Analysis System: Technical Documentation and Cultural Context

Introduction to Tea QI (茶氣)

In Chinese culture, QI (氣) represents the vital life force or energy that flows through all things. When applied to tea, QI refers to the tea's energetic effects on the body and mind. Tea QI (茶氣) is considered distinct from mere caffeine effects, encompassing the holistic influence of the tea's compounds, processing methods, and natural characteristics on the drinker's physical, mental, and energetic state.

System Overview

Our QI analysis system attempts to quantify these traditional concepts using measurable parameters while respecting the holistic nature of tea QI. The system considers:

1. Base Characteristics (基礎特性)
2. Compound Effects (化合物效應)
3. Processing Methods (製作方法)
4. Energy Movement (氣動)
5. Duration and Progression (持續與發展)

Calculation Components and Cultural Significance

1. Base Type Characteristics (茶類基礎)

Different tea types have inherent QI characteristics based on traditional understanding:

```
Green Tea (綠茶):
- Cooling score: +2.0
- Cultural basis: Associated with "clearing heat" and "rising yang"
- Traditional uses: Mental clarity, summer heat relief

White Tea (白茶):
- Cooling score: +1.5
- Cultural basis: Known for "gentle yin" properties
- Traditional uses: Cooling without depleting

Black Tea (紅茶):
- Warming score: +2.0
- Cultural basis: "Warm yang" properties
- Traditional uses: Morning energy, digestive support

Puerh Tea (普洱茶):
- Warming score: +2.5
- Cultural basis: "Deep earth qi" properties
- Traditional uses: Grounding, digestion, meditation

Oolong Tea (烏龍茶):
- Variable based on oxidation
- Cultural basis: "Balance of yin and yang"
- Traditional uses: Adaptive energy regulation
```

2. Compound Analysis (成分分析)

The system analyzes L-Theanine and Caffeine ratios, corresponding to traditional concepts:

L-Theanine/Caffeine Ratio Effects:

```
High Ratio (>2.0):
- Effect: Cooling +1.5
- Traditional concept: "Peaceful Spirit" (安神)
- Characteristics: Clear mind, calm body

Balanced Ratio (1.0-2.0):
- Effect: Neutral
- Traditional concept: "Harmony" (和諧)
- Characteristics: Focused awareness

Low Ratio (<1.0):
- Effect: Warming +1.0
- Traditional concept: "Rising Spirit" (提神)
- Characteristics: Active energy
```

3. Processing Methods (製作方法)

Processing methods are weighted based on their traditional understanding of QI influence:

Key Processing Weights:

```
Shade-Growing (覆蓋栽培):
- Cooling effect: +2.5
- Cultural significance: "Preserving inner essence" (保持精氣)
- Primary influence: Head-cooling, mind-clearing

Roasting (焙火):
- Warming effect: +2.2
- Cultural significance: "Fire transformation" (火法轉化)
- Primary influence: Grounding, deepening

Oxidation (氧化):
- Variable effect: +1.5 to +2.0
- Cultural significance: "Natural transformation" (自然轉化)
- Primary influence: Energy regulation

Aging (陳化):
- Complex effect: +2.3
- Cultural significance: "Time refinement" (時間精煉)
- Primary influence: Deep transformation
```

4. Energy Movement Analysis (氣動分析)

The system maps traditional concepts of QI movement to observable effects:

Movement Patterns:

```
Rising (上升):
- Indicators: Upper body focus, lifting sensation
- Traditional concept: "Rising clear" (清陽上升)

Sinking (下沉):
```

```
- Indicators: Lower body focus, grounding sensation
- Traditional concept: "Descending turbidity" (濁陰下降)

Circulating (循環):
- Indicators: Full body movement
- Traditional concept: "Harmonious circulation" (氣機調暢)
```

Reading and Interpreting Results

1. Temperature Balance (溫涼平衡)

The temperature balance indicates the tea's overall energetic nature:

```
Warming (溫性):
- Score >60% warming
- Traditional indication: Moves internal energy outward
- Best for: Cold conditions, morning, digestion

Cooling (涼性):
- Score >60% cooling
- Traditional indication: Concentrates energy inward
- Best for: Heat conditions, afternoon, mental work

Neutral (平性):
- Balanced scores
- Traditional indication: Regulating and adaptive
- Best for: General use, balance restoration
```

2. Intensity Scale (強度量表)

The 1-10 intensity scale correlates with traditional concepts:

```
1-3: Gentle (輕柔)
- Traditional: "Hidden influence" (暗效)
- Subtle, background effects

4-6: Moderate (中等)
- Traditional: "Harmonious action" (和效)
- Clear but balanced effects

7-10: Strong (強烈)
- Traditional: "Powerful influence" (猛效)
- Pronounced, immediate effects
```

3. Progression Timeline (時序發展)

The system maps the traditional understanding of tea QI development:

```
Initial Phase (初效):
- First 5-10 minutes
- Traditional: "First influence" (首透)

Peak Phase (極效):
- 10-30 minutes
- Traditional: "Full expression" (全現)
```

```
Finish Phase (尾效):
- 30+ minutes
- Traditional: "Lasting influence" (餘韻)
```

Practical Application

Reading Examples

For a traditional Gyokuro (玉露):

```
Temperature Balance:
- Cooling: 70%
- Warming: 30%
- Interpretation: Strong yin energy with refined clarity

Intensity: 8.5/10
- Indicates: Pronounced but refined effect
- Traditional view: "Noble and clear" (高雅清明)

Movement: Upper-focused
- Indicates: Head-clearing, uplifting
- Traditional view: "Rising clear qi" (清氣上揚)
```

Cultural Context in Modern Use

While this system quantifies traditional concepts, it's important to remember:

1. Personal Variation (個人差異):
    - Individual constitution affects experience
    - Traditional concept: "Person-tea harmony" (人茶相合)
2. Contextual Factors (環境因素):
    - Season, time, setting affect results
    - Traditional concept: "Heaven-Earth-Human unity" (天地人合一)
3. Preparation Impact (泡法影響):
    - Brewing methods can alter QI expression
    - Traditional concept: "Method brings forth essence" (法顯其真)

Conclusion

This system bridges traditional Chinese tea wisdom with modern analytical methods. While quantification helps understanding, remember that tea QI is traditionally viewed as a holistic experience that transcends simple measurements. The numbers and categories should serve as guidelines rather than absolute determinations, respecting the subtle and personal nature of tea's effects on body and mind.

Tea Mood Visualizer: Understanding Tea's Emotional Landscape

Overview

The Tea Mood Visualizer is an innovative system that analyzes and visualizes how different teas influence our emotional and mental states. By combining scientific understanding of tea compounds with traditional tea wisdom, this system helps reveal the subtle ways teas can affect our mood and well-being.

Core Concepts

The Science Behind Tea Moods

Tea's effects on our mood come from three main sources:

1. **Natural Compounds** - primarily caffeine and L-theanine
2. **Flavor Profiles** - the complex tastes and aromas
3. **Processing Methods** - how the tea was crafted

Think of it like a symphony where each element contributes to the final experience:

- Caffeine provides energy and alertness
- L-theanine brings calmness and focus
- Flavors evoke emotional responses
- Processing methods shape the overall character

Understanding Mood Categories

The system recognizes 14 distinct mood states that teas can promote:

Energy States

- **Energizing**: Promotes physical and mental vitality
- **Invigorating**: Creates mental alertness with brightness

Calming States

- **Calming**: Promotes mental tranquility
- **Serene**: Creates peaceful upliftment

Mental States

- **Focusing**: Enhances concentration and clarity
- **Contemplative**: Promotes thoughtful introspection

Comfort States

- **Cozy**: Induces warmth and comfort
- **Warming**: Provides inner warmth and centeredness

Grounding States

- **Grounding**: Connects to earthly stability
- **Meditative**: Promotes deep mindfulness

Harmonizing States

- **Harmonizing**: Promotes overall balance
- **Nourishing**: Supports holistic wellbeing

Uplifting States

- **Uplifting**: Elevates mood and spirit
- **Refreshing**: Creates renewal and vitality

How It Works

1. Compound Analysis

The system first looks at the relationship between caffeine and L-theanine. This ratio is crucial for understanding a tea's basic mood effects.

For tea enthusiasts:

- High L-theanine to caffeine ratios (2:1 or higher) promote calm focus
- Balanced ratios (1:1 to 2:1) create harmonious energy
- Lower ratios (below 1:1) provide more stimulation

For developers:

```
function analyzeCompounds(tea) {
  const ratio = tea.lTheanineLevel / tea.caffeineLevel;

  if (ratio >= 2) {
    return { primary: 'calming', secondary: 'focusing' };
  } else if (ratio >= 1) {
    return { primary: 'harmonizing', secondary: 'energizing' };
  } else {
    return { primary: 'energizing', secondary: 'invigorating' };
  }
}
```

2. Flavor Interpretation

Different flavor categories evoke distinct emotional responses. For example:

Floral notes tend to promote:

- Serenity and peace (jasmine, lotus)
- Harmonious feelings (orchid, lily)
- Gentle upliftment (rose, osmanthus)

Earthy notes often create:

- Grounding sensations (forest floor, wet stone)
- Meditative states (mushroom, wood)
- Contemplative moods (mineral, moss)

For developers:

```
const flavorMoodMap = {
  floral: {
    primary: ['serene', 'harmonizing'],
    intensity: 2.0,
    examples: ['jasmine', 'orchid', 'rose']
  },
  earthy: {
    primary: ['grounding', 'meditative'],
    intensity: 1.8,
    examples: ['forest', 'mineral', 'mushroom']
  }
};
```

3. Processing Influence

Tea processing methods significantly shape the final mood profile:

Light Processing (like green tea):

- Preserves natural calming compounds
- Maintains bright, fresh qualities
- Promotes clarity and focus

Heavy Processing (like aged pu-erh):

- Develops deep, grounding qualities
- Creates complex mood layers
- Enhances meditative aspects

For developers:

```
const processingEffects = {
  'steamed': {
    moods: ['calming', 'focusing'],
    intensity: 1.7
  },
  'heavily-roasted': {
    moods: ['grounding', 'warming'],
    intensity: 2.0
  }
};
```

Mood Combinations

One of the most fascinating aspects of tea is how different moods combine to create unique experiences. For example:

Serene + **Focusing** = "Mindful Clarity"

- Perfect for meditation or study
- Combines peace with mental precision

- Creates alert tranquility

Warming + Grounding = "Centered Warmth"

- Ideal for cold days or stress relief
- Brings physical comfort with mental stability
- Promotes deep relaxation while maintaining presence

For developers:

```
const moodCombinations = {
  "serene+focusing": {
    name: "Mindful Clarity",
    description: "A refined state where serenity meets mental precision"
  },
  "warming+grounding": {
    name: "Centered Warmth",
    description: "Physical comfort merged with stable presence"
  }
};
```

Practical Applications

Seasonal Adaptation

- Spring: Focus on uplifting and refreshing qualities
- Summer: Emphasize cooling and serene aspects
- Autumn: Enhance warming and grounding elements
- Winter: Prioritize warming and nourishing characteristics

Daily Timing

- Morning: Energizing and focusing combinations
- Afternoon: Harmonizing and refreshing blends
- Evening: Calming and grounding selections

Contributing

This system is designed to grow with community input. You can contribute by:

- Sharing your tea experiences
- Suggesting new flavor-mood correlations
- Proposing processing method effects
- Helping refine mood descriptions

Limitations

While this system provides valuable insights, remember that:

- Individual responses to tea vary
- Cultural context influences perception
- Personal associations matter
- Environmental factors play a role

Future Development

We're exploring:

1. Personal sensitivity profiles
2. Cultural context integration
3. Environmental factor analysis
4. Seasonal variation modeling
5. Machine learning applications

Note: This system combines scientific research with traditional tea wisdom to create a practical framework for understanding tea's effects on well-being.

Tea Mood Analysis System Documentation

Table of Contents

Overview

The Tea Mood Analysis System is a sophisticated framework for understanding and quantifying the emotional and physiological effects of tea. It combines scientific data about tea compounds with traditional knowledge and modern mood theory to create a comprehensive analysis system.

Key Features

- Compound-based mood analysis (Caffeine, L-Theanine)
- Flavor profile interpretation
- Processing method consideration
- Complex mood interaction modeling
- Normalized scoring system
- Seasonal considerations

Core Components

1. Atomic Moods

The system recognizes 14 fundamental mood states that can be produced by tea:

Mood Category	Moods	Primary Influences
Energy States	Energizing, Invigorating	Caffeine, Processing
Calming States	Calming, Serene	L-Theanine, Processing
Mental States	Focusing, Contemplative	Compound Ratio, Flavors
Comfort States	Cozy, Warming	Processing, Flavors
Grounding States	Grounding, Meditative	Processing, Flavor
Harmonizing States	Harmonizing, Nourishing	Compound Balance
Uplifting States	Uplifting, Refreshing	Flavor, Processing

2. Compound Effects

Caffeine and L-Theanine Interaction

The relationship between caffeine and L-Theanine is fundamental to tea's effects:

```
const ratio = tea.lTheanineLevel / tea.caffeineLevel;

// Example thresholds:
if (ratio >= 2) {
    // High L-Theanine relative to caffeine
    // Promotes: Calming, Focusing, Harmonizing
    scores.calming += 2.0;
    scores.focusing += 1.5;
    scores.harmonizing += 1.0;
} else if (ratio < 1) {
    // High caffeine relative to L-Theanine
    // Promotes: Energizing, Invigorating
    scores.energizing += 2.0;
    scores.invigorating += 1.5;
}
```

Real-world examples:

- Gyokuro (Ratio ~2.25): Strong calming and focusing effects
- Black Tea (Ratio ~1.25): Balanced energy and focus
- Matcha (Ratio ~2.0): Balanced alertness with calm

3. Flavor Influences

Flavors contribute significantly to mood effects. Here's how different flavor categories influence moods:

Floral Category

```
const floralMoodInfluence = {
    "jasmine": {
        primary: ["serene", "harmonizing"],
        intensity: 2.5,
        description: "Promotes peaceful serenity with gentle harmony"
    },
    "orchid": {
        primary: ["contemplative", "uplifting"],
        intensity: 2.0,
        description: "Encourages thoughtful reflection with subtle elevation"
    }
};
```

Example: Jasmine Silver Needle combines the calming effects of white tea with the serene qualities of jasmine.

Umami Category

```
const umamiMoodInfluence = {
    "marine": {
        primary: ["grounding", "nourishing"],
        intensity: 2.2,
        description: "Creates stable foundation with nurturing support"
    }
};
```

Example: Gyokuro's strong umami contributes to its grounding and nourishing qualities.

4. Processing Methods Impact

Processing methods can significantly alter a tea's mood profile:

Oxidation Levels

- Minimal (Green Tea): Preserves L-Theanine, promotes calming
- Partial (Oolong): Creates complexity, supports harmonizing
- Full (Black Tea): Enhances energy, supports invigoration

```
const oxidationImpact = {
    "minimal": {
        moods: ["calming", "focusing"],
        intensity: 1.8
    },
    "partial": {
        moods: ["harmonizing", "contemplative"],
        intensity: 1.5
    },
    "full": {
        moods: ["energizing", "invigorating"],
        intensity: 1.7
    }
};
```

Special Processing

- Shading (Gyokuro): Increases L-Theanine, enhances calm
- Roasting (Hojicha): Adds grounding, reduces stimulation
- Post-fermentation (Puerh): Deepens meditation, adds complexity

5. Mood Combination Examples

Here are detailed examples of how different aspects combine to create complex mood profiles:

Long Jing (Dragon Well)

```
const longJing = {
    compounds: {
        caffeine: 3,
        lTheanine: 8,
        ratio: 2.67
    },
    flavors: ["chestnut", "grass", "umami"],
    processing: ["pan-fired", "shaped"]
};
```

Resulting Mood Profile:

- Primary: Focusing (Score: 8.5)
    - High L-Theanine ratio
    - Clean vegetal flavors
    - Precise processing
- Secondary: Harmonizing (Score: 7.2)
    - Balanced processing
    - Umami presence

- Moderate caffeine

Da Hong Pao

```
const daHongPao = {
    compounds: {
        caffeine: 5,
        lTheanine: 6,
        ratio: 1.2
    },
    flavors: ["mineral", "roasted", "dark chocolate"],
    processing: ["heavy-roast", "oxidized"]
};
```

Resulting Mood Profile:

- Primary: Grounding (Score: 8.8)
  - Heavy roasting
  - Mineral notes
  - Complex processing
- Secondary: Warming (Score: 7.5)
  - Roasted flavors
  - Moderate caffeine
  - Full oxidation

Implementation Guide

Score Normalization

The system uses logarithmic normalization to create natural scaling:

```
function normalizeScore(raw) {
    return 10 * (1 - Math.exp(-raw/5));
}
```

This ensures:

- Small improvements at low scores have more impact
- Larger improvements needed at higher scores
- Natural ceiling effect
- Prevention of score inflation

Mood Interactions

The system recognizes complex interactions between moods:

```
function applyMoodInteractions(scores) {
    if (scores.calming > 5 && scores.focusing > 5) {
        scores.harmonizing += Math.min(scores.calming, scores.focusing) * 0.3;
    }
    // Additional interactions...
}
```

Practical Applications

Time of Day Considerations

- Morning: Focus on energizing, focusing combinations
- Afternoon: Favor harmonizing, refreshing combinations
- Evening: Emphasize calming, grounding combinations

Seasonal Adjustments

- Spring: Uplift serene and harmonizing qualities
- Summer: Enhance refreshing and cooling aspects
- Autumn: Emphasize grounding and warming qualities
- Winter: Focus on warming and nourishing elements

Advanced Topics

Mood Persistence

Different aspects of the tea experience have different duration profiles:

- Compound effects: 2-6 hours
- Flavor influences: 15-45 minutes
- Processing impacts: Variable, generally 1-3 hours

Environmental Factors

The system can be adjusted for:

- Temperature
- Humidity
- Time of day
- Season
- Setting

Future Development

Areas for potential expansion:

1. Integration of personal sensitivity factors
2. Machine learning for pattern recognition
3. Expanded flavor-mood correlations
4. Cultural context consideration
5. Environmental impact modeling

This documentation is regularly updated as new research and understanding emerges in the field of tea mood analysis.

Tea Mood Analysis Example: Moonlight Beauty

Let's walk through how the system analyzes Moonlight Beauty Bing Cha's mood profile.

Tea Characteristics

```
const moonlightBeauty = {
  name: "Moonlight Beauty Bing Cha",
  type: "white",
  origin: "Yunnan Province, China",
  caffeineLevel: 1,
  lTheanineLevel: 6,
  flavorProfile: ["apricot", "honey", "vanilla", "lilac"],
  processingMethods: ["withered", "sun-dried"]
};
```

Step-by-Step Analysis

1. Base Type Score

White teas start with inherent calming and serene qualities:

```
const baseScores = {
  calming: 1.5,    // White tea's natural gentle quality
  serene: 2.0,     // Strong serene characteristic of white tea
  harmonizing: 1.0  // Moderate harmonizing base
};
```

2. Compound Analysis

Caffeine (1) and L-Theanine (6) ratio calculation:

```
const ratio = lTheanineLevel / caffeineLevel;  // 6/1 = 6.0
```

This high ratio strongly influences the mood scores:

```
const compoundEffects = {
  calming: 2.5,     // High ratio promotes strong calming
  focusing: 1.8,    // Good for mental clarity
  energizing: 0.3   // Low caffeine means minimal energy
};
```

3. Flavor Profile Impact

Each flavor contributes to the mood profile:

```
const flavorEffects = {
  apricot: {
    moods: ['serene', 'harmonizing'],
    intensity: 1.8
  },
  honey: {
    moods: ['cozy', 'warming'],
    intensity: 1.5
  },
  vanilla: {
    moods: ['serene', 'calming'],
```

```
    intensity: 1.6
  },
  lilac: {
    moods: ['serene', 'harmonizing'],
    intensity: 2.0
  }
};
```

Combined flavor scores:

```
const flavorScores = {
  serene: 2.7,      // Strong contribution from floral and sweet notes
  harmonizing: 1.9, // Good balance from diverse flavors
  calming: 1.6,     // Gentle influence from vanilla
  cozy: 1.5         // Warm honey notes
};
```

4. Processing Method Influence

White tea processing is minimal but significant:

```
const processingEffects = {
  withered: {
    moods: ['serene', 'contemplative'],
    intensity: 1.2
  },
  'sun-dried': {
    moods: ['harmonizing', 'warming'],
    intensity: 1.4
  }
};
```

5. Score Normalization

Raw scores are combined and normalized using our logarithmic function:

```
function normalizeScore(raw) {
  return 10 * (1 - Math.exp(-raw/5));
}

// Example for serene score:
const rawSereneScore = (
  baseScores.serene +              // 2.0
  compoundEffects.calming * 0.5 +  // 1.25
  flavorScores.serene +            // 2.7
  processingEffects.withered.intensity  // 1.2
);  // Total: 7.15

const normalizedSerene = normalizeScore(7.15);  // ~8.2
```

6. Mood Interactions

The high serene and harmonizing scores create synergistic effects:

```
if (scores.serene > 6 && scores.harmonizing > 4) {
  scores.contemplative += Math.min(scores.serene, scores.harmonizing) * 0.3;
}
```

Final Mood Profile

After all calculations and normalizations, Moonlight Beauty's mood profile emerges:

Primary Mood: Serene (8.2/10)

- Driven by gentle processing
- Enhanced by floral notes
- Supported by high L-Theanine ratio

Secondary Mood: Harmonizing (7.4/10)

- Balanced flavor profile
- Gentle processing methods
- Well-proportioned compounds

Resulting Mood Combination: "Peaceful Harmony" Description: A refined state of serene tranquility merged with balanced harmony, creating an experience of gentle upliftment with stable peace.

Additional Mood Notes:

- Contemplative: 6.8/10
- Calming: 6.5/10
- Warming: 5.2/10
- Cozy: 4.8/10
- Energizing: 2.1/10

Practical Implications

This mood profile makes Moonlight Beauty ideal for:

- Evening meditation
- Gentle relaxation
- Thoughtful conversations
- Stress relief
- Creative contemplation

Best enjoyed when seeking:

- Mental clarity without stimulation
- Peaceful alertness
- Emotional balance
- Gentle mood elevation