

ERES Institute Technical Report: Classification of RT Empirics Using Cybernetic Framework

Executive Summary

This report defines the mandatory and recommended classification schema for Realist Theory (RT) Empirics according to the ERES Institute's cybernetic framework $C=R \times P / M$, where Cost = Resource × Purpose ÷ Method. Proper classification serves as the foundation for systemic diagnosis, optimization, and control within organizational systems.

1. Fundamental Classification Framework

1.1 Core Cybernetic Variables (MUST Classify)

All empirical data must be categorized into these four essential variables:

Resource (R)

Definition: Inputs, assets, and capacities available to the system.

| Category | Examples | Empirical Indicators |
|-----------|-------------------------------|--|
| Budget | Funding allocations, capital | Financial statements, budget reports |
| Personnel | Staff count, expertise levels | HR records, skill matrices, staffing reports |

| | | |
|---------------|------------------------------------|--|
| Technology | Software, hardware, infrastructure | System inventories, capability assessments |
| Temporal | Time allocations, schedules | Project timelines, time-tracking data |
| Informational | Data assets, knowledge base | Database metrics, knowledge repository stats |

Purpose (P)

Definition: Strategic goals, functions, or system teleonomy.

| Category | Examples | Empirical Indicators |
|--------------------|------------------------------------|---|
| Strategic_Goal | Market positioning, growth targets | Strategic plans, board objectives |
| Operational_Target | Efficiency metrics, output quotas | KPI dashboards, performance targets |
| Quality_Standard | Service levels, quality benchmarks | Quality metrics, customer satisfaction scores |
| Homeostatic | System stability requirements | System performance thresholds, SLA metrics |

Method (M)

Definition: Processes, procedures, and transformation mechanisms.

| Category | Examples | Empirical Indicators |
|-------------------------------|--|---|
| Workflow | Business processes, operational procedures | Process documentation, workflow diagrams |
| Algorithm | Decision logic, computational methods | Code repositories, algorithm specifications |
| Protocol | Standards, guidelines, rules | Policy documents, compliance checklists |
| Communication | Information exchange patterns | Communication logs, meeting minutes |

Cost (C)

Definition: Total expenditure, loss, or entropy incurred.

| Category | Examples | Empirical Indicators |
|-----------------------------|-------------------------------|--|
| Financial | Direct monetary expenditure | Expense reports, budget consumption |
| Temporal | Time delays, schedule impacts | Project delay metrics, cycle time measurements |
| Human | Burnout, turnover, morale | Employee surveys, turnover statistics |
| Opportunity | Foregone benefits, trade-offs | ROI calculations, comparative analysis |

| | | |
|----------|----------------------------|--|
| Systemic | Complexity, technical debt | System complexity metrics, maintenance costs |
|----------|----------------------------|--|

2. Advanced Diagnostic Classification (SHOULD Classify)

2.1 Relationship Dysfunctions

Empirics should be tagged to identify specific systemic failures:

| | |
|---------------------|------------------------------------|
| text | |
| Inefficiency_R-M | = Resource wasted by Method |
| Ineffectiveness_M-P | = Method misaligned with Purpose |
| Insufficiency_R-P | = Resources inadequate for Purpose |
| Misalignment_P | = Purpose conflicts or ambiguities |

2.2 Recursive System Levels

Data should be classified by organizational abstraction level:

| Level | Description | Example Tags |
|-------------|---------------------------|----------------------------|
| Strategic | Executive decision-making | Level_Strategic, C-Suite |
| Tactical | Management coordination | Level_Tactical, Department |
| Operational | Day-to-day execution | Level_Operational, Team |

2.3 Method Variability Patterns

| Pattern | Description | Diagnostic Value |
|-------------------|--------------------------|---------------------------------------|
| Method_Variation | Inconsistent application | Identifies process discipline issues |
| Method_Adaptation | Successful modifications | Reveals organic innovation |
| Method_Rigidity | Resistance to change | Highlights change management problems |

3. Implementation Schema

3.1 Empirical Data Tagging Structure

```
text
Primary: {R|P|M|C}_{Specific_Element}
Secondary: {Dysfunction_Type}_{Elements}

Tertiary: {System_Level}_{Context}

Example Implementation:

yaml
Data: "Team reported 20 hours overtime due to inefficient approval process"
Tags:
  - C_Temporal_Excess
  - Inefficiency_R-M
  - Level_Operational

  - Method_Approval_Process
```

3.2 Cross-Relational Analysis Matrix

| Resource → Method | Efficient | Inefficient |
|-------------------|-----------------------|-------------------------|
| Adequate | Optimal performance | Process redesign needed |
| Inadequate | Resource augmentation | Systemic failure |

4. Quality Assurance Criteria

4.1 Validation Checks

- Completeness: Every empirical observation must map to at least one cybernetic variable
- Specificity: Tags must be granular enough for diagnostic utility
- Consistency: Cross-observer tagging reliability >85%
- Recursivity: Classification must work across all system levels

4.2 Common Classification Errors to Avoid

| Error Type | Example | Correction |
|------------------|--|----------------------------------|
| Theme-based | Tagging as "communication issues" | Map to specific R/P/M/C elements |
| Activity-focused | Classifying actions without Purpose link | Always connect Method to Purpose |

| | | |
|-----------------------|---------------------------------------|-----------------------------------|
| Level-confusion | Mixing strategic and operational data | Explicit level tagging |
| Dysfunction-ambiguity | Not specifying failure type | Use standardized dysfunction tags |

5. Analytical Output Framework

5.1 Diagnostic Reporting

Classification enables generation of:

- Cost optimization opportunities: High_C instances with R*P/M analysis
- Resource allocation insights: R-P mismatch identification
- Method improvement priorities: M-P ineffectiveness hotspots
- Strategic alignment assessment: P coherence across levels

5.2 Predictive Modeling

Proper classification supports:

- Cost prediction: $C = R * P / M$ forecasting
- Intervention simulation: What-if analysis on R, P, M changes
- System viability assessment: C trend analysis and threshold modeling

6. Conclusion

The ERES cybernetic classification framework transforms RT Empirics from descriptive data into diagnostic intelligence. By mandating classification according to $C=R*P/M$ and supporting relational analysis, organizations gain:

1. Precise dysfunction localization
2. Quantified cost drivers
3. Recursive system understanding
4. Actionable optimization priorities

This systematic approach ensures that empirical analysis directly serves the core cybernetic objective: optimizing system viability through continuous cost minimization and purpose alignment.

ERES Institute - Cybernetic Systems Division

Classification Schema v2.3 - Approved for Implementation

Credits, References, and License Information

CREDITS & ATTRIBUTIONS

Framework Development

Primary Integration & Synthesis:

- **Joseph A. Sprute**, Founder - ERES Institute for New Age Cybernetics
 - Originator of NAC architecture (LOGOS, GAIA, PERC-BERC-JERC, UBIMIA)
 - Author of Generations to Come Declaration
 - Architect of 1000-Year Future Map

Collaborative Development:

- **Claude (Anthropic)** - Evidence-based practices integration, practical implementation protocols
- **DeepSeek (V3)** - Original RDSF articulation
- **Joseph A. Sprute** - Theoretical foundations, NAC systems design

Evidence Base Contributors

Community Development & Participatory Governance:

- Elinor Ostrom - Commons governance principles
- Xavier de Souza Briggs - Community capacity building
- Archon Fung - Deliberative democracy designs
- Yves Cabannes - Participatory budgeting methodology

Behavioral Economics & Decision Architecture:

- Richard Thaler & Cass Sunstein - Choice architecture, nudge theory
- Daniel Kahneman - Behavioral decision-making
- Dan Ariely - Predictable irrationality
- George Loewenstein - Intertemporal choice

Circular Economy & Ecological Design:

- Kate Raworth - Doughnut Economics framework
- Ellen MacArthur Foundation - Circular economy principles
- Janine Benyus - Biomimicry methodology
- William McDonough & Michael Braungart - Cradle to Cradle design

Systems Thinking & Resilience:

- Donella Meadows - Leverage points, systems thinking
- C.S. Holling - Adaptive cycles, panarchy
- Brian Walker & David Salt - Resilience thinking
- Fritjof Capra - Systems view of life

Environmental Psychology & Biophilic Design:

- Stephen Kaplan & Rachel Kaplan - Attention restoration theory
- Roger Ulrich - Biophilic design health outcomes
- Edward O. Wilson - Biophilia hypothesis
- Timothy Beatley - Biophilic cities

Community Economics & Cooperatives:

- Gar Alperovitz - Community wealth building
- Jessica Gordon Nembhard - African American cooperatives
- Marjorie Kelly - Ownership design
- Thomas Hanna - Democratic ownership

Transition & Social Movements:

- Rob Hopkins - Transition Towns methodology
- Naomi Klein - Climate justice movements
- adrienne maree brown - Emergent strategy
- Grace Lee Boggs - Place-based organizing

Measurement & Indicators:

- Mathis Wackernagel - Ecological footprint
- Robert Costanza - Genuine Progress Indicator
- Happiness Research Institute - Wellbeing metrics
- Global Reporting Initiative - Sustainability reporting standards

Technology & Governance:

- Beth Simone Noveck - Smart citizens, civic technology
- Audrey Tang - Digital democracy (Taiwan)
- Vitalik Buterin - Blockchain governance
- E. Glen Weyl - Radical markets, plural voting

Implementation Case Study Sources

- **Boulder, Colorado** - Transportation transformation data
 - City of Boulder Transportation Department
 - National Association of City Transportation Officials (NACTO)
- **Preston, UK** - Community wealth building model
 - Centre for Local Economic Strategies (CLES)
 - Democracy Collaborative
- **Seoul, South Korea** - Sharing city initiative
 - Seoul Metropolitan Government Sharing City Program
 - Shareable Cities network
- **Totnes, UK** - Transition Towns model
 - Transition Network
 - Rob Hopkins, founder

Institutional Contributors

Research Institutions:

- ERES Institute for New Age Cybernetics
- Schumacher Center for a New Economics
- New Economy Coalition

- Post Growth Institute
- Stockholm Resilience Centre
- Beijer Institute of Ecological Economics

Practice Networks:

- Transition Network (1000+ communities globally)
 - Global Ecovillage Network
 - US Federation of Worker Cooperatives
 - International Co-operative Alliance
 - Community Land Trust Network
 - Timebanking UK / TimeBanks USA
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LICENSE & USAGE TERMS

Dual License Structure

This integrated framework operates under two complementary licenses:

1. ERES Institute NAC Components

License: CARE Commons Attribution License v2.1 (CCAL)

Applies to:

- All NAC-specific systems, terminology, and architectures (LOGOS, GAIA, GERP, NBERS, BEREC, PERC, JERC, UBIMIA, Meritcoin, EarnedPath, SROC, GraceChain, REACI, SOMT, ECVS, VERTECA, Talonics, DOFA, Sentient Energy Grid, GSSG, AuraTech, EMCI, Semantic Spiral)
- Generations to Come Declaration
- 1000-Year Future Map
- Integration protocols

Terms:

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- **Prohibited Use:** Extractive, exploitative, or military applications without explicit written consent
- **Transparency Requirement:** Implementations must publish verifiable performance data (NBERS, BERC, PERC, JERC metrics) to retain NAC certification
- **ShareAlike:** Derivative works must use same license

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2. Evidence-Based Practices Integration

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Applies to:

- All evidence-based intervention descriptions
- Implementation protocols
- Measurement frameworks
- Case studies
- Practical guidance

Terms:

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- **No Additional Restrictions:** Cannot apply legal terms or technological measures that restrict others' rights

IMPLEMENTATION RIGHTS

Community & Non-Profit Implementation

CIL (Community Implementation License): Free for neighborhood/district-scale projects

Requirements:

- Publish baseline and ongoing NBERS assessments
- Share learnings and outcome data openly
- Participate in peer learning network
- Attribute ERES Institute NAC architecture

Municipal Implementation

MGL (Municipal Governance License): Free for city-wide deployments

Requirements:

- All CIL requirements plus:
- Join GAIA coordination network
- Standardized BERC, PERC, JERC reporting
- Open data APIs for research access
- Contribute to global knowledge base

Research & Academic Use

- Completely open for research, education, and publication
- Request: Cite framework and share findings
- Encouraged: Collaborate with ERES Institute on validation studies

Commercial Applications

- Sustainable businesses may implement NAC systems
- Licensing fees negotiable, prioritize alignment with framework ethics
- Revenue sharing for SROC markets and GAIA coordination infrastructure
- **Prohibited:** Use in fossil fuel, extractive, exploitative, or military industries

DATA & PRIVACY

Personal Data Protections

- All biometric and personal data collection requires explicit informed consent
- Data anonymization mandatory for aggregate reporting
- Individual right to data access, correction, and deletion
- No data sales or use for surveillance
- Open algorithms (no black-box decision-making affecting individuals)

Open Data Requirements

- Aggregate NBERS, BERC, PERC, JERC scores: Public
 - Methodology and calculations: Open source
 - Policy documents: Publicly accessible
 - Budget and expenditures: Transparent
 - Environmental monitoring: Real-time public access
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CONTACT & IMPLEMENTATION SUPPORT

- **For licensing inquiries:** Contact framework repository maintainers via ERES Institute
 - **For implementation support:** Join NAC practitioner network (details in repository)
 - **For research collaboration:** Contact Joseph A. Sprute via published ERES Institute channels
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Status: Implementation-Ready; Living Framework

Provenance:

- Author: Joseph A. Sprute (NAC architecture, 1000-year vision)
- Integration: Claude (Anthropic) + Joseph A. Sprute (evidence-based practices synthesis)
- Repository: ERES Institute Proof-of-Work

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