

Research Interfaces between Nebula and Existing Institutional Theories

Open questions for interdisciplinary research, professional review, and joint validation

The whole is sufficient to safeguard continued existence without engulfing the individual; resources can flow efficiently without turning people into instruments of efficiency; life can be happy, interesting, and enjoyable, while new meaning continually emerges and is carried forward.

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1 Document purpose and epistemic boundaries

This document does not draw sweeping conclusions on behalf of property-rights economics, political science, public administration, law, welfare studies, complex systems, AI governance, or cultural studies, nor present general-knowledge summaries as professional research. It only identifies Nebula's own questions, potential interfaces with established research, and areas requiring joint professional examination.

The Nebula master manuscripts first present their own goals, structure, and institutional prototypes in full. Research interfaces do not use existing scholars and concepts to endorse Nebula, nor rewrite it as a collage of established theories. They help researchers from different fields accurately identify positions open to criticism, comparison, and joint development.

2 Research objects Nebula has already developed

- The ordered and cyclical goal structure of freedom from survival insecurity, happiness in life, and a more meaningful existence;
- The three-dimensional stage-phase-goal-mode operating model;
- The whole-individual relationship in which Sparks constitute Nebula while Nebula does not own Sparks;
- Reconstruction of bundles of rights concerning resource ownership, use, scheduling, returns, responsibility, and exit;
- Private-domain operation as the norm, limited public-domain authorization, and structural contraction after tasks end;
- Separation of resource, professional, and civilizational-value powers;
- Humanity's highest decision-making weight and autonomy levels triggered by AGI capability conditions;
- Division of responsibilities between the Happiness Ladder, Dream Garden, and emergence and continuity of meaning;
- Coordination gains, dual-track transition, complete city-scale validation, and bounded formal tools.

3 Interfaces with property rights, contracts, and resource use

The Nebula Resource Pool does not begin from a binary choice of public or private ownership. It treats ownership, possession, custody, use, returns, scheduling, risk, and exit separately. These require joint examination with professional research on property rights, contracts, asset custody, public requisition, platform contracts, insurance, and bankruptcy.

Nebula question	Professional question for dialogue
Ownership does not equal use, and idleness is not automatically unlawful	Legal foundations and transaction costs of separating incidents of property rights
Voluntary entry, possible exit, and transparent returns	Contract fairness, information asymmetry, standard terms, and actual exit costs
Emergency call-up and subsequent compensation	Public requisition, proportionality, public finance, and judicial remedies
Use of digital resources, computing capacity, and data	Data rights, trade secrets, licensing, derived returns, and cross-border rules
Coexistence of contribution records and property-right returns	How to avoid duplicate incentives, conversion into personhood measures, and financialization

4 Interfaces with public governance and common resources

Nebula uses multiple subjects, layered autonomy, communities that allow exit, and public bottom lines rather than single-center administration. Comparison with research on common-resource governance, deliberative governance, network governance, public trusts, social organizations, and local autonomy is needed to examine applicability, free riding, capture, accountability, and limits of scale.

- At what scales and under what resource conditions can communities govern themselves?
- How can affected subjects form rules without excluding silent and vulnerable people?
- How can platforms, experts, resource owners, and public representatives prevent capture?
- How can local autonomy connect with the state's statutory responsibilities?
- How can temporary communities genuinely dissolve without developing organizational inertia?

5 Interfaces with welfare, capabilities, and happiness research

The Happiness Ladder is not a hierarchy of personhood from low to high. Nor does it make subjective satisfaction, consumption, or meaning a single welfare goal. It concerns combinations of conditions for survival, the body, daily life, relationships, autonomy, exploration, creation, and meaning.

Nebula judgment	Research interface
Happiness is not the same as meaning	Plurality and incommensurability of welfare goals
Basic guarantees make choices genuine	Capabilities, opportunities, structural constraints, and life transitions
Staying, leaping, and returning are allowed	Nonlinear life courses and cultural differences
Indicators observe civilizational conditions only	Subjective experience, objective conditions, participatory assessment, and indicator ethics
The right not to be optimized	Behavioral interventions, nudges, paternalism, and boundaries of autonomy

6 Interfaces with states, cities, and multilevel governance

Nebula does not abolish states, cities, or existing public systems. The state continues to carry constitutional, legislative, fiscal, public-security, and final decision-making responsibilities. Cities are the principal settings for complete validation and public-service coordination. At the international level, establishing minimum shared governance interfaces takes priority.

- How can states' final decision-making powers coexist with shared transnational risks?
- What are the boundaries of authorization, public finance, judicial authority, and residents' rights in city experiments?
- Will matter-specific delegation and administrative responsibility create new accountability gaps?
- How can roles among the state, markets, communities, and platforms adjust dynamically?
- How can successful pilots spread without compulsory uniformity?

7 Interfaces with complex systems, resilience, and systems engineering

Intelligent ERP, the Resource Pool, and the eight-phase model involve complex coupling, adaptability, redundancy, common-cause failures, disconnected autonomy, and multiobjective optimization. Professional research needs to test whether Nebula increases tail risks and system dependence as it improves average efficiency.

Research object	Key question
Cross-domain semantics and digital twins	Gaps between models and reality, data timeliness, and human experience
Efficiency and redundancy	Balance between optimal utilization and recovery capability
Distributed autonomy	Local disconnection, conflicting rules, and limits of consistency
Stages and phases	State transitions, hysteresis, false triggering, and emergency exit
Self-repair	Whether the system can detect harm it causes rather than only repair technical faults

8 Interfaces with digital rights, platforms, and data governance

Nebula emphasizes private-domain operation as the norm, minimum necessary openness, nonexpansion of authorization, synchronized expiry of derived permissions, and data contraction after tasks end. It needs interfaces with professional institutions concerning privacy, data protection, platform responsibility, digital identity, algorithmic explanations, and protection of children and older people.

- What separate rights do subjects hold over identity, memory, relationships, agents, and derived models?
- When is consent genuinely effective in complex public systems, and when is additional protection needed?
- How can model training, verifiable outputs, and raw data be separated?
- How can cross-platform interoperability avoid expanding data centralization and platform control?
- When digital life is an extension of a subject, how can property rights, personhood, inheritance, and deletion be distinguished?

9 Interfaces with AI governance and human-machine decisions

The human-machine governance specialist manuscript proposes L0-L3 matters and A0-A4 autonomy levels, jointly triggered by capability, safety, auditing, responsibility, law, and social trust. These need joint validation with research on technical safety, value alignment, explainability, liability law, automation bias, human oversight, and international governance.

Nebula prototype	Open question
AGI does not hold civilizational sovereignty	What technologies and institutions can make ultimate control substantive rather than merely formal?
Autonomy triggered by capability conditions	How are reliability thresholds defined, who validates them, and how is regulatory capture prevented?
Multiple-model explanations and dissent agents	Can these reduce a single AGI's information monopoly and humans' cognitive dependence?
Automatic expiry of emergency powers	How can technical systems implement this and accept legal and public oversight?
Responsibility anchors	How can responsibility and compensation be allocated across chains of multiple models, suppliers, and organizations?

10 Interfaces with culture, diverse happiness, and meaning research

The Dream Garden and meaning specialist manuscripts insist that cultural encounter does not mean homogenization, that systems cannot grant meaning, and that civilizational memory must coexist with the right to forget. Cultural studies, anthropology, religion, ethics, literature, art, and local knowledge must participate together, rather than engineering systems generalizing cultural needs.

- How do different cultures understand happiness, subjects, relationships, responsibility, and continuity of life?
- How can cross-cultural resource opening avoid consumerization, appropriation, and homogenization driven by online traffic?
- How can civilizational memory avoid both forgetting public harm and permanently possessing individual lives?
- How can digital continuity respect differences in ritual, death, family, and religion?
- How can the emergence of meaning maintain shared underlying rules and diverse forms of expression?

11 Open questions requiring joint professional research

1. Does Nebula or its coordination layer need separate legal personality? If so, how should its powers, assets, responsibilities, and dissolution be bounded?
2. Could voluntary entry into the Resource Pool become voluntary in form alone under highly unequal conditions?
3. How can humanity's highest decision-making weight be legitimately constituted at global, national, local, professional, and individual scales?
4. When AGI's understanding far exceeds that of humans, how can humans retain substantive judgment and the ability to refuse?
5. How can indicators of happiness conditions avoid policy manipulation, cultural bias, and individual scoring?
6. How can contribution-fact vectors be mutually recognized across subdomains without creating an overall whole-person score?
7. How can city-scale experiments obtain effective controls without turning residents into nonconsenting experimental subjects?
8. When will questions of the long-term subjecthood of digital life meet the conditions for entering public institutional research?
9. How can Nebula's international interfaces maintain minimum shared safety across different institutions and value systems?
10. Can stages, phases, and goal modes yield falsifiable predictions through complex-system models?

12 Proposed methods and collaborative outputs

Method	Suitable tasks
Normative analysis and conceptual clarification	Rights, subjects, sovereignty, happiness, meaning, and irreversible boundaries
Comparative institutional research	Different countries, cities, industries, and common-resource mechanisms
Legal and policy sandboxes	Authorization, data, resource pools, AGI autonomy, and compensation
System dynamics and multi-agent simulation	Transition dynamics, interest-driven strategies, risks, and diffusion

Method	Suitable tasks
City-scale action research	Real public-service, resource, happiness, and governance loops
Participatory research	Affected subjects, vulnerable groups, cultural communities, and the public
Red-teaming and stress tests	Misuse, capture, disconnection, common-cause failures, and emergency powers
Long-term tracking and narrative research	Happiness in life, relationships, meaning, and intergenerational consequences

Suggested outputs include reviews of concepts and boundaries, institutional comparison reports, lists of legal issues, pilot agreement templates, indicators and simulation models, annual city-validation reports, failure-case repositories, public editions, and proposals for minimum international interfaces.

13 Presentation principles for research institutions

- First present the problems Nebula addresses and the structures it has developed, then move to disciplinary interfaces.
- Do not draw sweeping conclusions for established professional fields or substitute a few canonical names for actual research.
- Clearly distinguish established judgments, institutional prototypes, hypotheses awaiting validation, and open questions.
- Allow professional institutions to offer fundamental criticism of concepts, paths, and feasibility.
- Nebula's master manuscripts retain their own intellectual agency; academic interfaces must not dilute the ordered goals of survival, happiness, and meaning in return.
- Joint research aims at real-world validation and openness to criticism, rather than obtaining endorsements.

Nebula needs to enter the existing world of knowledge to be tested, but cannot establish itself by rewriting itself as a footnote to existing theories.

Reading guide and personalized further reading

P06-NEBULA-011 | V1.0 | Interdisciplinary research bridge

What this manuscript covers

Submits Nebula for joint validation by research on property rights, contracts, public governance, welfare, complex systems, digital rights, AI governance, and culture.

Current stage

A cross-stage research interface. It does not draw conclusions on behalf of disciplines or use established theories to endorse Nebula; it preserves counterexamples, evidence debts, and entry points for joint research.

Continue reading

1. Upward | Nebula General Framework

Enter questions of general higher-level definitions, governance, and the three-layer interface.

<https://www.civitas.top/en/documents/p06-nebula-013/>

2. Toward methods | Nebula Layered Guide to Indicators, Computation, and Simulation Tools

Clarify evidence, models, comparative tools, and disciplines against false precision.

<https://www.civitas.top/en/documents/p06-nebula-010/>

3. Toward resources | Nebula Startup Edition Resource Pool Specialist Manuscript

Enter questions of property rights, contracts, common resources, and bundles of rights.

<https://www.civitas.top/en/documents/p06-nebula-002/>

4. Toward governance | Nebula Startup Edition Human-Machine Decision-Making and Governance Specialist Manuscript

Enter stage-specific research on states, cities, human-machine decisions, and responsibility structures.

<https://www.civitas.top/en/documents/p06-nebula-006/>

5. Toward validation | Nebula City-Scale Integrated Validation Plan

Convert research questions into comparable city-scale validation with rollback.

<https://www.civitas.top/en/documents/p06-nebula-009/>

6. Toward academia | Nineteen-Paper Academic Canonical Register

Enter the Academic Canonical registration layer for nineteen papers and the interdisciplinary dissemination system.

<https://www.civitas.top/en/library/academic/>

Stable website entry

<https://www.civitas.top/en/documents/p06-nebula-011/>

Nebula family entry

<https://www.civitas.top/en/families/p06-nebula/>

Complete library

<https://www.civitas.top/en/library/>