The PSE Research Programme

Foundational Charter

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The PSE Research Programme
Foundational Charter
Architecture, Methodology and Research Strategy

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Statement of Purpose

The PSE Research Programme treats organization as a fundamental object of scientific investigation. Its central objective is to develop an interdisciplinary conceptual framework that explains how coherent organization emerges, persists, develops, and transforms across successive organizational levels.

The Principle of Systematic Exclusion (PSE) is proposed as the programme's foundational organizational principle within a relational ontology of organization. Its adequacy as a foundational principle remains subject to the programme's continuing theoretical and empirical evaluation.
It provides the conceptual foundation from which progressively more specific theoretical frameworks are systematically derived.

- The programme does not assume that PSE is the only conceivable generative principle. It proposes PSE as the working foundational hypothesis to be evaluated throughout the research programme.

- The programme does not replace existing scientific disciplines. It provides a conceptual architecture within which findings from different disciplines may be interpreted as contributions to a cumulative investigation of organization.

This document defines the programme's foundations, methodological principles, research strategy, and conceptual structure. It serves as the constitutional reference for the theoretical and empirical studies that constitute the programme.

Contents

Part I — Foundations

1. Introduction: Why a Research Programme?
2. The Conceptual Foundations of the Research Programme
3. The Architecture of the PSE Research Programme

Part II — Methodology

4. Principles for Theory Development
5. Criteria for Scientific Progress
6. Boundaries and Scope of the Research Programme

Part III — Programme

7. Scientific Significance
8. Research Programme Structure
9. Concluding Perspective

References

The PSE Research Programme

Foundational Charter – Architecture, Methodology and Research Strategy

Abstract

The PSE Research Programme treats *organization* as a fundamental object of scientific investigation. It examines whether the emergence, persistence, and transformation of coherent organization across different organizational levels and domains can be understood through a common generative principle. This Charter establishes the programme's conceptual foundations, methodological principles, architectural structure, criteria for scientific progress, and long-term research strategy.
The Principle of Systematic Exclusion (PSE) functions as the programme's proposed foundational organizational principle, from which progressively differentiated theoretical frameworks are developed.

Existing scientific disciplines retain their methodological and explanatory autonomy within this architecture. The programme provides a common conceptual framework through which organizational relations across different domains can be compared and developed theoretically.

The Charter defines the programme's scope, establishes its principal conceptual dependencies, and positions current and future studies within a coherent research architecture. It serves as the constitutional reference for the continuing development of the PSE Research Programme.

Keywords

Principle of Systematic Exclusion; organization; conceptual architecture; systems theory; emergence; organizational persistence; organizational scale invariance; interdisciplinary research; research programme; scientific methodology.

Programme Synopsis

Mission

To investigate the emergence, persistence, and transformation of coherent organization across successive organizational levels.

Foundational Organizational Principle

The Principle of Systematic Exclusion (PSE) within a generative relational ontology of organization.

Scientific Objective

To develop a cumulative conceptual framework capable of explaining organization across disciplinary boundaries without reducing one domain to another.

Methodological Position

Generative relational ontology of organization.

Research Strategy

Progressive development from foundational principles to domain-specific theories, followed by empirical investigation within established scientific disciplines.

Long-term Vision

To establish a common conceptual architecture through which biology, systems science, cognitive science, artificial intelligence, philosophy, and related disciplines may investigate organization using a shared theoretical vocabulary.

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1. Introduction: Why a Research Programme?

Scientific progress has been driven to a remarkable extent by specialization. By narrowing their scope, physics, chemistry, biology, cognitive science, sociology, and philosophy have developed increasingly powerful methods for investigating particular classes of phenomena (Kuhn, 1962; Mayr, 1982). Yet some scientific questions cross the boundaries that specialization has created. *Organization* is one of them.

Organized systems emerge, persist, form boundaries, develop new levels of individuality, and sometimes lose the conditions that once sustained them. Such processes appear in very different forms across physical, biological, cognitive, social, and symbolic domains.
The mechanisms involved may differ profoundly, yet the organizational questions recur. Whether these similarities merely reflect analogous processes or indicate a more general organizational principle remains an open question (Simon, 1962; Bateson, 1979; Prigogine & Stengers, 1984).

The search for principles capable of relating organization across scientific domains has an important precedent in *von Bertalanffy's General System Theory* (von Bertalanffy, 1968). The PSE Research Programme begins with this open question.
It investigates whether a common generative principle can account for the emergence, persistence, and transformation of organized systems across different domains while preserving the methodological autonomy of the disciplines that study them.
This requires a fundamental distinction: organization is the programme's object of scientific inquiry; the Principle of Systematic Exclusion is the proposed explanatory principle through which that object is investigated.

PSE proposes that coherent organization arises through processes of systematic exclusion[1].
From this working foundational principle, progressively more specific theoretical frameworks are developed for organizational phenomena that emerge at successive levels.
These include biological individuality, reflective organization, the relation between internal coherence and contextual congruence, and the conditions under which symbolic systems become capable of transgression.

This Charter defines the conceptual architecture, methodological principles, and long-term research strategy within which these investigations proceed.
Individual monographs address distinct scientific questions and develop progressively more specific propositions without reconstructing the entire framework from first principles. Therefore the programme is cumulative: each study depends upon earlier conceptual foundations while extending them to new organizational problems.

The cumulative architecture also changes how individual studies should be read and evaluated. A monograph can be assessed for the scientific claims it makes within its own domain, while its broader significance depends on the position it occupies within the developing research programme.

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[1] Canonical definitions of the foundational concepts used throughout the PSE Research Programme are provided in *Monograph No. 1A – Canonical Glossary and Conceptual Dependency Map*. This Charter introduces these concepts only insofar as required to establish the programme's foundations.

Existing scientific disciplines retain their explanatory and methodological autonomy within this architecture. The programme asks whether organizational phenomena investigated separately within those disciplines can also be understood as successive expressions of a common generative process. If such a process exists, its scientific value lies in providing a conceptual framework through which insights from different fields can become mutually informative (Lakatos, 1978; Popper, 1959).

The central research question of the programme may therefore be formulated as follows:

- Primary research question
  How does coherent organization emerge, persist, and become transformed across successive organizational levels?

- Secondary research question
  Can these processes be explained by a common generative principle operating across organizational domains?

The chapters that follow establish the conceptual and methodological framework through which these questions are investigated.
Subsequent monographs then evaluate, refine, and extend that framework through increasingly domain-specific theoretical development and, where appropriate, empirical investigation.

2. The Conceptual Foundations of the Research Programme

2.1 Scientific Motivation

Organization occupies an unusual position in science. Physics, biology, cognitive science, and the social sciences all investigate organized systems, yet organization itself is rarely their primary object of inquiry. Concepts such as energy, information, evolution, and natural selection acquired broad scientific significance because they made relations visible across phenomena that had previously been studied separately (Kuhn, 1962; Simon, 1962).
Organization may warrant a similar investigation.

The scientific question is therefore deeper than identifying organizational similarities across disciplines. It concerns the conditions under which coherent organization becomes possible at all.
What allows organized systems to emerge, maintain an identity, persist under changing conditions, and generate new levels of organization?

The PSE Research Programme approaches physical, biological, cognitive, social, and symbolic systems from this perspective. Their domain-specific mechanisms remain distinct, while their organizational properties become objects of comparative investigation. The programme thereby asks a question that precedes many discipline-specific explanations:

what makes persistent coherent organization possible?

This question establishes the conceptual point of departure for PSE.

2.2 The Principle of Systematic Exclusion

The programme addresses this question through the Principle of Systematic Exclusion (PSE), proposed as its working foundational organizational principle. In its most general formulation:

> Coherent organization emerges through systematic processes of exclusion that establish and maintain the boundaries required for persistent organization.

Within the programme, exclusion denotes the generation of organizational distinctions through which coherent systems acquire and maintain identity. Some interactions become stabilized within the developing organization; others remain outside it.
Through this selective stabilization, boundaries, identities, functions, and conditions for persistence can emerge (Spencer-Brown, 1969; Deacon, 2011).

Exclusion is therefore treated as a generative organizational process. It does not merely remove possibilities from an already existing system; it participates in establishing the organization through which a system becomes distinguishable in the first place.

The formulation deliberately remains independent of any particular scientific discipline. It is proposed as an ontological proposition concerning the emergence of organized systems, whose adequacy remains subject to the continuing theoretical and empirical development of the programme.

2.3 Levels of Explanation

A foundational principle alone does not constitute a complete scientific explanation. The programme therefore distinguishes three levels of explanation, each preserving principles established at earlier levels while introducing concepts required by newly emerging organizational properties.

> Level I — Ontological foundation

This level investigates the emergence of coherent organization itself. It asks how persistent systems become possible through systematic exclusion.

> Level II — Derived theoretical frameworks

From this ontological foundation, progressively differentiated theoretical frameworks are developed that address organization within particular domains. These include, among others, biological individuality, reflective organization, symbolic systems, and transgression.

> Level III — Empirical research programmes

Derived theories generate empirically assessable hypotheses that can be investigated within established scientific disciplines. Disciplinary research thereby provides the empirical setting in which programme-derived propositions can be assessed, compared, and refined.

Keeping these levels distinct is essential for scientific evaluation. An empirical application may fail while leaving the foundational proposition open, just as revision of the ontological framework need not invalidate empirical findings established independently within a discipline.

Claims must therefore be assessed at the explanatory level at which they are made.

2.4 Methodological Position

The PSE Research Programme adopts a generative relational ontology of organization. It investigates whether different organizational domains can share generative principles while retaining the properties and explanatory requirements specific to each domain.

This position connects two established scientific orientations. *Reductionist* approaches seek explanation through processes operating at lower organizational levels; *pluralistic* approaches emphasize the explanatory autonomy of different levels.
PSE investigates the relations between levels without assuming that one can be exhaustively translated into another.

Biology, cognition, social organization, and ethics therefore retain their domain-specific methods and explanatory vocabularies. What the programme seeks across these domains are recurring organizational relations: *processes through which distinctions, boundaries, persistence, and new levels of organization become possible*.

The result is an interdisciplinary ontology intended to support multiple domain-specific theories within a common conceptual architecture.

2.5 Epistemological Position of the Research Programme

Science cannot occupy a position outside the conditions under which human understanding becomes possible. Every scientific theory is developed within an organizational and symbolic framework through which *Reality* is interpreted. The PSE Research Programme is subject to the same constraint: its concepts, models, and explanatory frameworks arise through human reflective organization and are therefore constructed within the human *holoscript*[2].

Scientific theories can accordingly be understood as organizational representations. They organize distinctions through which Reality becomes scientifically explorable, interpretable, and communicable. Their explanatory significance depends both on their internal coherence and on the degree of organizational congruence they achieve with the Reality they seek to understand. This epistemological limitation is consistent with Kant's distinction between reality as it may exist independently of human cognition and reality as it becomes accessible through the conditions of human experience (Kant, 1998).

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[2] Within the PSE Research Programme, the *holoscript* denotes the integrated symbolic-organizational framework through which reflective systems construct and maintain a coherent representation of their world. Its canonical definition and conceptual relations are provided in *Monograph No. 1A, Canonical Glossary and Conceptual Dependency Map*. The concept is developed further in the monograph on *Reflective Organization and Transgression*.

Korzybski captured this epistemological constraint in the observation that "*the map is not the territory*" (Korzybski, 1933). A scientific theory is a map: an organized conceptual representation that remains distinct from the Reality it seeks to understand.
Bateson later developed the implications of this distinction within ecological and systems-oriented epistemology, particularly in relation to learning, communication, and adaptation (Bateson, 1972).

Within PSE, *organizational congruence* provides the criterion through which this representational relation can be evaluated. Conceptual representations may differ in the extent to which their organization remains congruent with the organizational structure of Reality. Scientific progress can therefore be understood as the development and revision of conceptual organizations toward greater warranted congruence, *without* claiming final or unmediated correspondence with Reality.

The same criterion must apply to PSE itself. The framework is an organizational product of the human holoscript and occupies no privileged position outside the conditions it describes. Its propositions remain subject to evaluation in terms of coherence, warranted congruence, empirical adequacy, and critical revision.

Epistemological reflexivity is therefore part of the programme's methodology. New monographs refine the common conceptual architecture as new theoretical and empirical findings become available. Revision is expected whenever it increases warranted congruence with Reality while preserving those parts of the programme that remain scientifically adequate.

This epistemological commitment also defines the methodological orientation of the research programme. The human holoscript provides the organizational framework within which scientific inquiry necessarily proceeds.
Every new monograph should therefore be understood as a further refinement of the common conceptual architecture established in this Charter rather than as an independent theoretical construction. The programme itself remains open to revision whenever conceptual refinement increases its organizational congruence with Reality while preserving the cumulative continuity of the research programme.

Programme Proposition H.1 — Scientific Representation

> Scientific theories are organizational representations rather than direct descriptions of Reality. Their scientific value depends on the degree to which their conceptual organization exhibits organizational congruence with the organizational structure of Reality.

Programme Proposition H.2 — Epistemological Reflexivity

> Every theoretical framework, including the PSE Research Programme itself, is necessarily developed from within the holoscript of the reflective system that constructs it. Scientific progress consists in developing conceptual organizations of progressively greater congruence with Reality rather than in escaping the representational conditions imposed by the holoscript itself.

The Moving Train Metaphor provides the canonical illustration of this principle: just as passengers cannot step outside a moving train while remaining part of its journey, scientific inquiry cannot step outside the organizational perspective through which Reality is interpreted. Progress is achieved by improving the internal organization of our conceptual frameworks, thereby increasing their congruence with Reality, while recognizing that every act of scientific understanding necessarily proceeds from within the human holoscript.

3. The Architecture of the PSE Research Programme

Once organization itself becomes the object of inquiry, the programme requires an architecture different from a conventional disciplinary classification. Its monographs are therefore ordered by conceptual dependency: questions arising at higher organizational levels build upon concepts established at earlier ones.

The sequence is cumulative. Each successive level preserves the conceptual foundations already established while introducing the distinctions required by newly emerging organizational properties. The order of the monographs therefore reflects neither the historical development of scientific disciplines nor the chronology in which individual studies were written. It follows the developing organization of the theoretical framework itself.

Four successive levels structure this development. Each is organized around a central research question.

Level I — Foundations of Organization

The first level establishes the ontological foundations of the programme.
Its central research question is:

How does coherent organization become possible?

PSE is introduced here as the programme's proposed generative principle for investigating how distinctions, boundaries, persistence, organizational coherence, and nested organization emerge. These concepts establish the foundation on which subsequent organizational levels depend.

Level II — Reflective Organization

The second level asks what changes when organized systems acquire the capacity to represent aspects of their own organization and context:

How can reflective organization preserve internal coherence while maintaining congruence with its context?

Reflection introduces new organizational possibilities. Symbolic representation, language, conceptual reasoning, and cultural transmission allow knowledge to accumulate beyond the immediate experience of individual systems. Yet the same capacity creates a new vulnerability: *internally coherent representations can persist even as their congruence with context declines.*

This level develops the concepts of second-order exclusion, coherence, congruence, and transgression. Together they address a distinctive vulnerability of reflective organization: internally coherent representations may continue to regulate behaviour even when their congruence with a changing context has become insufficient for continued adaptive persistence.
Transgression describes the organizational transition in which internal coherence progressively becomes the dominant regulator under these conditions.

Level II thereby provides the conceptual bridge from foundational organization to the domain-specific theories developed at higher organizational levels.

Level III — Domain-Specific Organization

The third level asks how the organizational principles established at the preceding levels become expressed within particular scientific domains. Here the programme moves from its common conceptual foundations toward progressively more specialized forms of organization.

Each monograph addresses a distinct class of phenomena while preserving the conceptual foundations on which it depends. New concepts are introduced where the organizational properties of a particular domain require them. In this way, specialization can increase without fragmenting the common architecture of the programme.

The principal domains investigated at this level include:

- biological individuality;
- organism–environment relations;
- consciousness;
- artificial intelligence;
- institutions;
- ethics;
- Attachment, Love and Social Cohesion;
- civilization and cultural evolution.

These domains differ substantially in their phenomena, methods, and explanatory requirements. Their inclusion within a common research programme does not imply that they can be reduced to a single form of explanation. The question is whether the foundational organizational principles developed at earlier levels can support productive theoretical development within each domain while allowing genuinely domain-specific properties to emerge.

Level III therefore provides a critical test of the programme's explanatory fertility. If a common generative principle has scientific significance across organizational domains, it should enable increasingly differentiated theoretical development without dissolving the conceptual relations that connect those domains.

The programme thus becomes more specialized as it develops, while remaining conceptually connected to its foundations.

Level IV – Empirical Research

The fourth level connects theoretical development with empirical investigation. Its central question is:

> Can propositions derived from the programme generate research questions that are empirically accessible within established scientific disciplines?

Theoretical propositions acquire scientific significance when they can guide investigation beyond the conceptual framework from which they emerged. Biology, ecology, neuroscience, psychology, sociology, anthropology, artificial intelligence, philosophy, and related disciplines provide the methods through which particular programme-derived claims can be examined. Each discipline retains its methodological autonomy and its own standards of evidence.

The relation also works in the opposite direction. Empirical findings may support, constrain, refine, or challenge the theoretical propositions that generated the research questions. Revised theory can then expose new relations and generate new questions for empirical investigation.

Theory and observation thus enter a recursive process of mutual development. Conceptual analysis opens paths for empirical inquiry; empirical findings return to the conceptual framework and may require its revision (Popper, 1959; Lakatos, 1978).

Empirical research therefore closes the explanatory loop without closing the programme itself.

Concluding Architecture

The four levels form a single explanatory architecture. Their relation is one of conceptual dependency: each level draws upon principles established earlier while introducing concepts required by organizational properties that emerge at later levels.

This dependency gives the programme both continuity and room for differentiation. New domains can extend its explanatory scope without requiring its conceptual foundations to be reconstructed each time. Findings at later theoretical and empirical levels can, in turn, expose limitations in those foundations and initiate their revision.

The architecture is therefore cumulative without being closed. Its coherence depends on preserving the conceptual relations between successive levels; its scientific development depends on keeping those relations open to critical evaluation and revision.

Organizational Scale Invariance

A central working proposition of the PSE Research Programme is that equivalent organizational principles may recur across different organizational scales because the same generative processes govern the emergence, persistence, and transformation of organized systems.
This recurrence is termed *organizational scale invariance*.

Scale invariance does not imply that systems at different organizational levels are identical. Physical, biological, cognitive, social, and symbolic systems differ substantially in their components, mechanisms, and domain-specific properties. What may recur across these differences are equivalent organizational principles arising from the same underlying generative processes of organization.

This proposition provides an important link between the architecture of the programme and its scientific development. If equivalent organizational principles recur across scales, concepts established at one organizational level may help disclose relations at another. Their applicability cannot be assumed in advance. Each domain must establish whether the proposed organizational equivalence is theoretically warranted and, where possible, empirically supported.

Organizational scale invariance therefore concerns the recurrence of generative organizational principles across scales while preserving the specificity of the systems in which those principles become expressed. It provides a basis for cross-domain comparison without requiring the reduction of one organizational level to another.
Within the research programme, organizational scale invariance functions as a heuristic for discovery; it does not constitute independent evidence that cross-domain organizational regularities exist.

4. Principles for Theory Development

The architecture established in the preceding chapter defines how the different levels of the research programme relate to one another. A second question now follows:

> how can the programme develop without losing the conceptual relations on which that architecture depends?

Theory development within PSE is cumulative. New theoretical frameworks build upon established concepts, introduce additional distinctions where new organizational properties require them, and remain open to revision as theoretical and empirical understanding develops. Progress therefore involves more than the accumulation of observations. It also requires continuity between successive levels of explanation.

The following principles specify how that continuity is maintained while allowing the programme to differentiate and expand.

4.1 Hierarchical Development

Theory development follows the conceptual dependencies established by the architecture of the programme. Each study begins from concepts developed at earlier organizational levels and extends them only where the phenomena under investigation require additional explanatory distinctions.

Earlier principles thereby remain constitutive of later theoretical development. Higher organizational levels add explanatory specificity while preserving the conceptual relations on which they depend (Lakatos, 1978; Simon, 1962).

The hierarchy thus expresses conceptual dependency while preserving the explanatory autonomy of successive organizational levels.

4.2 Emergence of New Organizational Properties

Successive organizational levels may introduce properties that cannot be adequately described using the conceptual vocabulary developed for earlier levels (Mayr, 1982; Simon, 1962). Such properties create the need for additional explanatory concepts.

Conceptual novelty within the programme must therefore arise from explanatory necessity. New concepts are introduced when existing ones no longer provide sufficient differentiation for the phenomena under investigation, allowing the theoretical vocabulary to expand with increasing organizational complexity.

New organizational properties thus drive conceptual differentiation.

4.3 Conceptual Continuity

Conceptual differentiation requires continuity. A concept established at one organizational level retains its defined meaning throughout the programme unless it is formally revised. When a higher level requires a more specific formulation, the relation between the foundational concept and its specialized form must be made explicit.

This principle allows concepts to acquire greater domain-specific precision without obscuring their conceptual ancestry. Earlier definitions remain applicable within the explanatory contexts for which they were formulated; specialized concepts extend that framework to newly emerging organizational conditions.

Conceptual continuity makes cumulative differentiation possible.

4.4 Domain Independence

Foundational concepts are formulated independently of any particular scientific discipline. Their theoretical and empirical expression, however, becomes increasingly specific as the programme enters biological, cognitive, social, technological, and symbolic domains.

Domain independence concerns the organizational principle while allowing its realization to vary across domains. The same foundational concept may acquire different domain-specific expressions because the systems in which it operates differ in their components, mechanisms, constraints, and emergent properties (Bateson, 1979; Maturana & Varela, 1980; Simon, 1962).

A common conceptual foundation can therefore support different forms of scientific explanation.

4.5 Progressive Differentiation

As the programme develops, its conceptual architecture becomes progressively differentiated. Concepts introduced at foundational levels acquire greater specificity when they are applied to organizational properties that emerge at later levels. This vertical development allows the programme to increase explanatory precision without abandoning the conceptual relations from which those concepts arose.

A complementary development occurs across organizational scales. Complexity research has identified common principles and recurring relationships across sets of systems that differ in their specific organization, while emphasizing that their generality must remain subject to investigation within the systems concerned (Mitchell, 2009, pp. 294–295).
Within PSE, this provides a point of departure for a more specific question: whether equivalent organizational principles may recur across distinct systems because the same underlying generative processes of organization are involved.
Recognizing such recurrence can allow relations established in one domain to guide investigation in another without assuming that the systems themselves are equivalent.

These two directions of development serve different functions. Progressive differentiation increases conceptual specificity across successive organizational levels; organizational scale invariance concerns the possible recurrence of equivalent organizational principles across different scales. Together they allow the programme to become increasingly differentiated while remaining connected by a common generative architecture.

Vertical development expands explanatory specificity; cross-scale comparison tests whether equivalent organizational principles can be identified beyond the domains in which they were first formulated.

The programme can therefore increase in complexity without losing conceptual continuity.

4.6 Scientific Evaluation

Theoretical development within the programme must ultimately be judged by what it contributes scientifically. Individual studies are therefore evaluated along three complementary dimensions:

- Scientific contribution
  A study should provide explanatory insight within its own domain and contribute to the development of questions, concepts, or relations that can be investigated further.

- Programme coherence
  New theoretical developments should preserve the conceptual dependencies established within the broader architecture of the research programme. Where revision of that architecture becomes necessary, the affected dependencies and the consequences of their revision should be made explicit.

- Explanatory fertility
  Theoretical developments should generate novel empirical questions, conceptual integrations, or explanatory connections that would be unlikely to emerge without the programme.

These criteria address different aspects of scientific progress. Scientific contribution concerns what a study adds within its own domain; programme coherence concerns its relation to the cumulative conceptual architecture; explanatory fertility concerns what further investigation the study makes possible.

The scientific value of the programme therefore depends on both local and cumulative progress: individual studies must advance understanding within their domains while the programme as a whole must continue to generate productive relations among them (Lakatos, 1978; Popper, 1959).

A research programme advances when its conceptual architecture continues to generate science beyond itself.

5. Criteria for Scientific Progress

The preceding chapter established how individual theoretical contributions are evaluated. A further question concerns the development of the research programme as a whole:

  what would count as scientific progress within PSE?

Scientific progress and programme growth must be distinguished. A programme may expand by adding concepts, theories, and domains without thereby increasing its explanatory adequacy. Progress requires that such development strengthen the programme's capacity to organize existing knowledge, generate new explanations and research questions, and remain open to critical evaluation and revision (Lakatos, 1978).

The criteria developed below therefore concern the progressive development of the programme's conceptual architecture and the domain-specific theories derived from it. They provide a stable framework for assessing whether cumulative development increases explanatory adequacy rather than merely increasing conceptual complexity.

5.1 Conceptual Coherence

The first criterion concerns the internal coherence of the programme. New theoretical developments should remain logically consistent with its foundational concepts and preserve the conceptual dependencies established within its architecture.

Coherence does not require conceptual immobility. When theoretical or empirical developments make revision necessary, the affected concepts and the consequences for propositions that depend upon them should be identified explicitly.
Revision can thereby increase conceptual precision without obscuring the continuity of the programme's development.

A progressive programme becomes conceptually clearer as it develops.

5.2 Explanatory Integration

Scientific progress should increase the programme's capacity to relate organizational phenomena that are otherwise investigated independently. Explanatory integration occurs when such phenomena can be situated within a common conceptual framework while preserving the explanatory integrity of the disciplines in which they are studied.

Integration therefore concerns relations among explanations. A productive conceptual framework can make previously separate findings mutually informative without requiring their disciplinary theories, methods, or objects of investigation to become identical (Bateson, 1979).

Progressive integration reveals relations that disciplinary separation alone may leave unseen.

5.3 Generative Capacity

A progressive research programme should do more than reorganize what is already known. Its conceptual architecture should generate questions, hypotheses, distinctions, and explanatory connections that create possibilities for further theoretical and empirical investigation.

Generative capacity is therefore assessed by what becomes investigable because of the programme. A theoretical development gains scientific value when it opens lines of inquiry that would otherwise remain unavailable or less visible.

A productive framework expands both explanation and inquiry.

5.4 Empirical Accessibility

Foundational concepts within PSE are necessarily abstract, but theoretical development should progressively generate propositions that become accessible to empirical investigation as the programme moves toward domain-specific formulations (Popper, 1959).

Empirical accessibility creates a critical interface between conceptual development and scientific observation. Findings may support, constrain, refine, or challenge particular theoretical propositions and can thereby expose limitations in the conceptual framework from which those propositions were derived.

The degree of empirical accessibility will differ across organizational domains. The relevant requirement is that increasing theoretical specificity should, where the subject matter permits, create increasingly identifiable conditions under which programme-derived propositions can be critically investigated.

Conceptual development acquires scientific leverage when it creates possibilities for empirical constraint.

5.5 Interdisciplinary Fertility

The programme should enable productive exchange between disciplines that investigate organizational phenomena from different perspectives. Interdisciplinary fertility is demonstrated when concepts or relations developed within one domain generate useful questions, comparisons, or explanatory connections in another.

Such exchange must preserve the methodological and explanatory standards of the disciplines involved. Its value lies in increasing conceptual communication across domains while allowing each field to retain the methods appropriate to its own objects of investigation.

Interdisciplinary fertility therefore measures the programme's capacity to create scientifically productive connections across domains, not simply the number of disciplines it encompasses (Bateson, 1979).

5.6 Progressive Refinement

Scientific progress is cumulative only when the programme remains capable of revising its own conceptual organization. As theoretical and empirical investigation proceeds, definitions may become more precise, distinctions sharper, and relations among concepts more explicit. New findings can expose ambiguities or limitations that earlier stages of development could not yet reveal.

Revision is therefore an expected part of programme development. Its function is to increase explanatory adequacy while preserving a traceable relation between earlier and later formulations. Conceptual development and empirical investigation participate in the same iterative process: each can reveal where the other requires refinement.

Within PSE, this process can be understood as an effort to increase the warranted congruence of the programme's conceptual organization with Reality, while recognizing the epistemological limits established in §2.5.

A progressive programme must remain capable of revising the distinctions through which it understands its own object of inquiry.

Characteristics of a Progressive Research Programme

The PSE Research Programme demonstrates scientific progress insofar as its development:

- increases conceptual clarity and coherence;
- strengthens explanatory integration across organizational domains;
- generates new theoretical and empirical questions;
- produces progressively more empirically accessible propositions where the subject matter permits;
- creates productive interdisciplinary connections;
- remains open to explicit and traceable conceptual revision;
- increases explanatory adequacy while preserving conceptual continuity;
- achieves conceptual economy by introducing new concepts only where they are required for explanatory adequacy.

These characteristics should be considered together. No single criterion is sufficient to establish progress across the programme as a whole. Their combined function is to distinguish cumulative scientific development from the mere expansion of a conceptual system.
The programme progresses when increasing differentiation produces increasing explanatory power.

6. Boundaries and Scope of the Research Programme

A research programme defined by a domain-independent organizational principle requires explicit boundaries. Without them, increasing explanatory scope can become indistinguishable from unrestricted application.

The PSE Research Programme investigates organization as a general scientific phenomenon. Its scope encompasses the emergence, persistence, and transformation of organized systems and the appearance of new organizational properties across successive levels. The programme develops explanatory principles concerning these processes while leaving domain-specific mechanisms and empirical investigation to the scientific disciplines in which they occur.

The scope of PSE is therefore defined by specific organizational questions and by the conditions under which its principles can be meaningfully investigated across scientific domains.

6.1 Scope of Investigation

The programme is organized around four closely related questions:

- How do organized systems emerge?
- How do organized systems maintain coherence through time?
- How do successive organizational levels introduce genuinely new properties?
- Under what conditions can reflective systems preserve internal coherence while their congruence with a changing context becomes insufficient for continued adaptive persistence?

These questions define the programme's common field of investigation. Individual monographs address particular aspects of them within increasingly specific organizational domains, while empirical investigation proceeds through the methods appropriate to those domains.

6.2 Scientific Position

The programme occupies an ontological and theoretical position within scientific inquiry. Its primary objective is to develop explanatory principles concerning organization itself and to investigate whether these principles can support productive theoretical development across different organizational domains.

Empirical investigation remains situated within the relevant scientific disciplines, each with its own methods, concepts, and standards of evidence. This methodological pluralism is consistent with Feyerabend's critique of attempts to prescribe a single universal method for scientific inquiry (Feyerabend, 1975). PSE provides a conceptual architecture through which relations among organizational phenomena studied in those disciplines can be identified, compared, and developed theoretically (Simon, 1962; Bateson, 1979).

Its integrative function operates at the level of organizational principles while preserving disciplinary autonomy.

6.3 Domain Independence

The Principle of Systematic Exclusion is proposed as a domain-independent organizational principle. Domain independence means that its foundational formulation is not restricted to the material composition, mechanisms, or explanatory vocabulary of any single scientific domain.

Physical systems, biological organisms, cognitive processes, institutions, and symbolic systems nevertheless remain distinct forms of organization, each with domain-specific properties and causal mechanisms. Application of a common organizational principle therefore requires translation into concepts and propositions appropriate to the domain under investigation.

Complexity research provides examples of common principles and relationships identified across sets of otherwise distinct systems, while leaving their range of applicability open to investigation (Mitchell, 2009, pp. 294–295). Within PSE, this motivates the more specific hypothesis that equivalent organizational principles may recur across distinct systems because

the same underlying generative processes of organization are involved. Such recurrence must be established theoretically and, where possible, empirically within the relevant domains; domain independence alone provides no evidence that it occurs.

Domain independence defines the reach of the principle; domain-specific investigation determines the adequacy of its application.

6.4 Limits of the Programme

Several areas of investigation lie beyond the current scope of the programme. These include:

- mathematical formalization of the framework;
- quantitative modeling of organizational dynamics;
- discipline-specific empirical implementations;
- comprehensive taxonomies of organizational systems;
- comprehensive empirical validation of all proposed theoretical relationships.

These limitations define the present stage and methodological focus of the programme. Future studies may address them where theoretically appropriate and empirically feasible. Their current exclusion keeps the programme focused on establishing and developing its conceptual architecture.

6.5 Conceptual Revision

The boundaries defined in this Charter reflect the current conceptual state of the research programme. They provide continuity for cumulative development while remaining open to revision when theoretical analysis or empirical evidence reveals limitations in the existing framework.

Revision may refine definitions, sharpen conceptual distinctions, modify theoretical propositions, or introduce additional principles where explanatory adequacy requires them. Changes should remain explicit and traceable so that their consequences for dependent concepts and theories can be evaluated.

The programme thereby combines conceptual continuity with critical revizability. Its long-term scientific value depends on its capacity to develop while keeping its existing architecture open to correction.

6.6 Position within Scientific Practice

The PSE Research Programme is intended as a framework for collaborative scientific investigation. Researchers from different disciplines can use its conceptual architecture to examine whether apparently diverse organizational phenomena exhibit equivalent generative principles while retaining the methods and explanatory standards appropriate to their own fields.

The programme seeks explanatory integration at the level of organizational principles. Domain-specific causal mechanisms remain objects of investigation within the relevant disciplines, and the framework makes no claim to provide a comprehensive explanation of every phenomenon.

Its scientific value must ultimately be judged by what the framework enables: the questions it generates, the conceptual relations it reveals, the theoretical developments it supports, and the empirical investigations it stimulates (Lakatos, 1978).

PSE enters scientific practice as a framework to be used, tested, refined, and, where necessary, revised.

Guiding Principles of the PSE Research Programme

The programme is guided by seven general commitments:

1. Conceptual clarity precedes theoretical complexity.
2. Successive organizational levels preserve established conceptual dependencies while introducing new properties and the distinctions required to investigate them.
3. Domain-specific theories retain their methodological and explanatory autonomy.
4. Conceptual development should generate opportunities for empirical investigation wherever the subject matter permits.
5. Scientific progress requires continuing conceptual refinement and increasing explanatory adequacy.
6. Every theoretical proposition remains open to critical examination and explicit revision.
7. Organizational scale invariance functions as a heuristic for investigating whether equivalent organizational principles recur across different scales while preserving the specificity of the systems in which they are expressed.

7. Scientific Significance

Scientific development depends on interaction between empirical discovery and conceptual innovation. New observations can expose limitations in existing explanations, while new conceptual frameworks can reveal relations and questions that were previously difficult to formulate.
The scientific significance of the PSE Research Programme must be assessed within this reciprocal process.

Systems biology investigates interactions within biological networks and the system-level properties emerging from them (Kitano, 2002). Complexity science examines emergent organization arising from interactions among multiple components and complex adaptive systems (Mitchell, 2009). Network science identifies structural regularities across biological, technological, and social networks (Barabási, 2016). Research on the evolution of organismality has likewise intensified questions about organization across biological scales (Queller & Strassmann, 2009). Developments in artificial intelligence add new questions concerning representation, adaptation, autonomy, and higher-order organization.

These developments converge on a broader scientific problem:

> how does coherent organization emerge, persist, differentiate, and transform across different organizational domains and scales?

Complexity research seeks common principles that can provide insight into sets of otherwise distinct complex systems, while their range of applicability remains subject to investigation (Mitchell, 2009, pp. 294–295). PSE takes this search as a point of departure for a more specific hypothesis: that equivalent organizational principles may recur across distinct systems because the same underlying generative processes of organization are involved.

The scientific significance of the programme therefore depends on what follows from this question: *whether its conceptual architecture can integrate otherwise separate lines of inquiry, generate productive theoretical development, and create empirically accessible research questions across organizational domains*.

7.1 Organization as a Scientific Question

Physical structures, living organisms, ecosystems, nervous systems, languages, institutions, and scientific theories differ profoundly in composition, dynamics, and causal organization. Yet each raises questions concerning the emergence, persistence, differentiation, and transformation of organized relations.

Treating organization as an object of scientific inquiry makes these questions available for systematic comparison. Within PSE, such comparison concerns organizational principles and relations while preserving the properties and explanatory requirements specific to each domain.

The scientific opportunity lies in determining whether such comparison reveals equivalent organizational principles across otherwise distinct systems and whether those equivalences can support further theoretical and empirical investigation.

7.2 Conceptual Integration

Scientific specialization has generated increasingly precise explanatory languages, but concepts developed within one field are not always readily transferable to another.
Cross-domain investigation therefore requires a way of relating concepts without erasing the distinctions that make disciplinary explanations scientifically useful.

The PSE framework seeks to provide such conceptual interoperability. Shared organizational concepts can establish points of comparison among disciplines while their domain-specific theories, methods, and standards of evidence remain intact (Bateson, 1979).

Conceptual integration is scientifically productive when it allows findings from different fields to become mutually informative and exposes relations that disciplinary vocabularies alone may leave difficult to recognize.

7.3 Generating New Questions

A central measure of scientific significance is the capacity of a framework to generate questions that would otherwise remain unavailable or less visible. Within PSE, cross-domain comparison should therefore lead to new theoretical distinctions, hypotheses, and possibilities for empirical investigation.

Such questions may arise across the organizational domains developed within the programme, including biological individuality, reflective organization, consciousness, artificial intelligence, institutions, ethics, attachment, love and social cohesion, and civilization and cultural evolution. Their value depends on whether they lead to scientifically productive investigation.

The progressiveness of a research programme cannot be established by declaration. It must be assessed through the theoretical developments and empirically productive research questions the programme actually generates (Lakatos, 1978).

The long-term significance of PSE will therefore depend on the research that becomes possible because of it.

7.4 Cumulative Knowledge

The monographic structure allows theoretical development to accumulate across successive investigations. Concepts established in earlier studies remain available to later ones, while new organizational domains introduce additional distinctions and opportunities for revision.

This structure allows individual monographs to contribute at two levels. Each can advance understanding within its own domain while also testing, refining, or extending the conceptual architecture shared by the programme as a whole. Later investigations can therefore build on earlier foundations without reconstructing them from first principles.

Cumulative knowledge within PSE is consequently measured by the development of an increasingly differentiated and critically revisable explanatory architecture.

7.5 Collaboration Across Disciplines

The organizational domains addressed by the programme exceed the expertise and methodological reach of any single discipline. Their investigation therefore requires collaboration among researchers who can evaluate programme-derived questions within the scientific contexts to which those questions apply.

The shared conceptual architecture provides a basis for such collaboration. Specialists retain responsibility for the methods, evidence, and domain-specific explanations relevant to their fields while contributing findings that can inform the broader theoretical development of the programme.

Sustained interdisciplinary collaboration requires conceptual transparency: shared terms must remain sufficiently precise for researchers from different fields to determine where genuine equivalences exist and where apparent similarities conceal important differences (Bateson, 1979).

The programme's collaborative value therefore depends on its capacity to make cross-disciplinary comparison scientifically precise.

The scientific significance of the PSE Research Programme will ultimately be determined by its consequences for scientific inquiry: whether it clarifies organizational concepts, reveals productive relations across domains, generates new theoretical and empirical questions, and supports cumulative research that remains open to critical revision. Its significance therefore rests on the scientific work its conceptual architecture makes possible.

8. Research Programme Structure

The principles established in the preceding chapters acquire their concrete form in a sequence of interconnected monographs. Each addresses a defined organizational problem while contributing to the cumulative development of the programme.

The sequence follows conceptual dependency. Concepts established in earlier monographs provide foundations for later investigations, while successive studies introduce the distinctions required by newly encountered organizational properties. The resulting structure translates the programme's conceptual architecture into a long-term research strategy.

8.1 Foundational Studies

The first monographs establish the conceptual architecture of the research programme and develop its ontology of organization. They define the principles and concepts required to investigate how coherent organization emerges, forms boundaries, persists, and develops across organizational levels.

Monograph No. 1 establishes the *Foundational Charter*. Monograph No. 1A provides the *Canonical Glossary and Conceptual Dependency Map*, and Monograph No. 2 develops the *Ontology of Organization*. Together, these monographs provide the conceptual foundation on which subsequent investigations build.

8.2 Reflective Organization

Monograph No. 4 extends the framework to *reflective organization*: systems capable of representing aspects of their own organization and context. It develops the concepts required to investigate symbolic representation, second-order exclusion, coherence, congruence, and transgression.

Reflection introduces an organizational condition in which internally coherent representations can continue to regulate behaviour as contextual conditions change. The resulting possibility of divergence between coherence and congruence provides a conceptual foundation for later investigations of consciousness, artificial intelligence, institutions, ethics, and cultural evolution.

8.3 Domain-Specific Studies

Subsequent monographs extend the framework to distinct organizational domains. Monograph No. 3 addresses *biological individuality*; Monographs No. 5–10 develop the programme through *consciousness, artificial intelligence, institutions, ethics, attachment, love and social cohesion*, and *civilization and cultural evolution*.

Each investigation introduces the domain-specific concepts and explanatory distinctions required by its subject while remaining connected to the programme's shared conceptual architecture. Together, these studies provide opportunities to investigate whether equivalent organizational principles recur across different scales and domains while preserving the specificity of the systems involved.

Development need not proceed strictly in numerical order. Parallel work across domains may reveal conceptual relations, empirical questions, or requirements for revision that influence subsequent monographs.

8.4 Empirical Development

The monographic programme is intended to generate propositions and research questions that become increasingly accessible to empirical investigation as theoretical development enters specific scientific domains.

Such questions can be investigated using the methods and standards of evidence appropriate to the disciplines concerned. Empirical findings can in turn constrain, refine, or challenge programme-derived propositions and expose questions requiring further conceptual development.

Empirical research thereby connects the monographic architecture to the recursive process of theoretical development described in the preceding chapters.

8.5 Continuous Development

The programme architecture remains open to theoretical and empirical development. Later investigations may require additional distinctions, refinement of existing concepts, or revision of propositions established earlier in the programme.

Such development should remain traceable within the conceptual dependency structure established by the Charter and the Canonical Conceptual Framework. The programme can

thereby evolve while preserving a clear record of how later formulations relate to their conceptual foundations.
Table 1 presents the current structure of the PSE Research Programme.

Table 1. Structure of the PSE Research Programme

Monograph	Organizational Level	Principal Contribution
Monograph No. 1	Research Programme	Foundational Charter
Monograph No. 1A	Canonical Conceptual Framework	Canonical Glossary and Conceptual Dependency Map
Monograph No. 2	Organization	Ontology of Organization
Monograph No. 3	Biological Individuality	Individuality in the Context of Systematic Exclusion
Monograph No. 4	Reflective Organization	Reflective Organization and Transgression
Monograph No. 5	Consciousness	Consciousness in the Context of Systematic Exclusion
Monograph No. 6	Artificial Intelligence	Artificial Intelligence in the Context of Systematic Exclusion
Monograph No. 7	Institutions	Institutions in the Context of Systematic Exclusion
Monograph No. 8	Ethics	Ethics in the Context of Systematic Exclusion
Monograph No. 9	Attachment, Love and Social Cohesion	Attachment, Love and Social Cohesion in the Context of Systematic Exclusion
Monograph No. 10	Civilization and Cultural Evolution	Civilization and Cultural Evolution in the Context of Systematic Exclusion

Table 1 represents the programme architecture established by this Charter. Its sequence expresses conceptual dependency. Subsequent changes in publication status and programme development are documented in the accompanying Supplementary Materials.

The programme combines a stable conceptual architecture with an open research trajectory. Its scientific value will depend on whether this structure continues to generate productive theoretical development, empirical investigation, and critical revision.

9. Concluding Perspective

9.1 Scientific Progress

Scientific progress emerges through the interaction of observation, conceptual development, and critical evaluation. Empirical findings acquire explanatory significance within conceptual frameworks, while those frameworks remain subject to revision as new observations, questions, and inconsistencies arise (Kuhn, 1962; Lakatos, 1978).

The PSE Research Programme places its own development within this continuing interaction between conceptual construction and scientific inquiry.

9.2 Organization as a Scientific Programme

The PSE Research Programme takes organization itself as its primary object of inquiry. It asks whether phenomena studied separately across scientific domains can disclose equivalent organizational principles when examined through a shared conceptual architecture.

This question defines both the programme's integrative ambition and its scientific risk: the proposed cross-domain relations must prove explanatorily and scientifically productive rather than remain conceptual analogies.

9.3 The Principle of Systematic Exclusion

The Principle of Systematic Exclusion provides the programme's proposed foundational organizational principle. From it, the programme develops progressively differentiated frameworks for investigating the emergence, persistence, and transformation of organization across distinct domains and organizational levels.

PSE thereby functions as a proposed generative principle whose scientific value depends on the explanatory developments and investigable consequences that can be derived from it.

9.4 Criteria for Long-Term Scientific Value

The long-term scientific value of the programme will be determined by its consequences for inquiry: whether it clarifies organizational relations, generates productive theoretical and empirical questions, supports explanatory integration across domains, and remains responsive to critical evaluation.

The success of individual propositions contributes to that assessment, while the programme as a whole must be judged by the cumulative research trajectory it makes possible.

9.5 Continuous Development

The conceptual architecture established by this Charter provides continuity for the research programme while remaining open to critical examination. Theoretical development, empirical evidence, and alternative explanations may require concepts to be refined, propositions to be modified, or existing dependencies to be reconsidered (Popper, 1959).

Such revision forms part of the scientific development of the programme. Its purpose is to increase explanatory adequacy while keeping the history and consequences of conceptual change explicit.

9.6 From Charter to Research Programme

This Charter establishes the conceptual foundations, architecture, methodological commitments, and research strategy of the PSE Research Programme. It defines the conditions under which the programme begins; it cannot determine the outcome of the investigations that follow.

Subsequent monographs move from this common foundation into increasingly specific organizational questions. Their task is to develop, critically evaluate, refine, and where necessary revise the propositions established within the programme while generating connections to empirical research and disciplinary expertise.

The future of PSE therefore lies in the research it makes possible. Its scientific standing will be determined by the cumulative quality of that research, by the criticism it withstands and incorporates, and by its capacity to deepen scientific understanding of organization across domains.

With this Charter, the conceptual architecture is established. The research programme begins with what follows from it.

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Publications within the PSE Research Programme

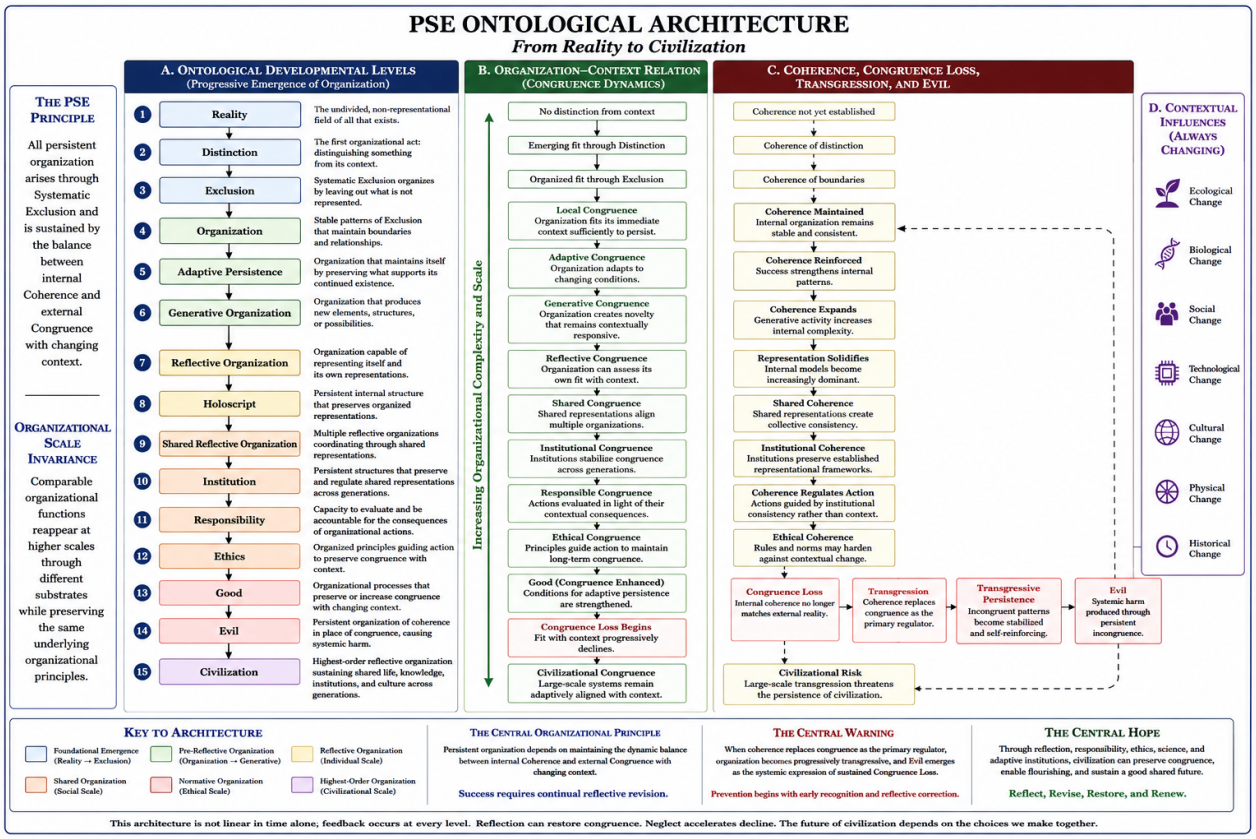
Stolting, H. C. J. (2026). The PSE Research Programme: Foundational Charter—Architecture, methodology and research strategy (PSE Monograph No. 1, Version 1.0). https://roosterriddle.com/documenten/Sources/Monograph1v1.pdf

Stolting, H. C. J. (2026). Canonical glossary and conceptual dependency map (PSE Monograph No. 1A, Version 1.0). https://roosterriddle.com/documenten/Sources/Monograph1Av1.pdf

Stolting, H. C. J. (2026). Ontology of organization (PSE Monograph No. 2). https://roosterriddle.com/documenten/Sources/Monograph2v1.pdf

For the current publication record and development status of the programme, see Supplementary Material S1, Publications within the PSE Research Programme.

Introductory podcast *(AI, 23 minutes)*: https://roosterriddle.com/documenten/The_Principle_of_Systematic_Exclusion.m4a


PSE ONTOLOGICAL ARCHITECTURE
From Reality to Civilization
THE PSE PRINCIPLE
All persistent organization arises through Systematic Exclusion and is sustained by the balance between internal Coherence and external Congruence with changing context.
ORGANIZATIONAL SCALE INVARIANCE
Comparable organizational functions reappear at higher scales through different substrates while preserving the same underlying organizational principles.
A. ONTOLOGICAL DEVELOPMENTAL LEVELS
(Progressive Emergence of Organization)
1 Reality
The undivided, non-representational field of all that exists.
2 Distinction
The first organizational act: distinguishing something from its context.
3 Exclusion
Systematic Exclusion organizes by leaving out what is not represented.
4 Organization
Stable patterns of Exclusion that maintain boundaries and relationships.
5 Adaptive Persistence
Organization that maintains itself by preserving what supports its continued existence.
6 Generative Organization
Organization that produces new elements, structures, or possibilities.
7 Reflective Organization
Organization capable of representing itself and its own representations.
8 Holoscript
Persistent internal structure that preserves organized representations.
9 Shared Reflective Organization
Multiple reflective organizations coordinating through shared representations.
10 Institution
Persistent structures that preserve and regulate shared representations across generations.
11 Responsibility
Capacity to evaluate and be accountable for the consequences of organizational actions.
12 Ethics
Organized principles guiding action to preserve congruence with context.
13 Good
Organizational processes that preserve or increase congruence with changing context.
14 Evil
Persistent organization of coherence in place of congruence, causing systemic harm.
15 Civilization
Highest-order reflective organization sustaining shared life, knowledge, institutions, and culture across generations.
B. ORGANIZATION–CONTEXT RELATION
(CONGRUENCE DYNAMICS)
Increasing Organizational Complexity and Scale
No distinction from context
Emerging fit through Distinction
Organized fit through Exclusion
Local Congruence
Organization fits its immediate context sufficiently to persist.
Adaptive Congruence
Organization adapts to changing conditions.
Generative Congruence
Organization creates novelty that remains contextually responsive.
Reflective Congruence
Organization can assess its own fit with context.
Shared Congruence
Shared representations align multiple organizations.
Institutional Congruence
Institutions stabilize congruence across generations.
Responsible Congruence
Actions evaluated in light of their contextual consequences.
Ethical Congruence
Principles guide action to maintain long-term congruence.
Good (Congruence Enhanced)
Conditions for adaptive persistence are strengthened.
Congruence Loss Begins
Fit with context progressively declines.
Civilizational Congruence
Large-scale systems remain adaptively aligned with context.
C. COHERENCE, CONGRUENCE LOSS, TRANSGRESSION, AND EVIL
Coherence not yet established
Coherence of distinction
Coherence of boundaries
Coherence Maintained
Internal organization remains stable and consistent.
Coherence Reinforced
Success strengthens internal patterns.
Coherence Expands
Generative activity increases internal complexity.
Representation Solidifies
Internal models become increasingly dominant.
Shared Coherence
Shared representations create collective consistency.
Institutional Coherence
Institutions preserve established representational frameworks.
Coherence Regulates Action
Actions guided by institutional consistency rather than context.
Ethical Coherence
Rules and norms may harden against contextual change.
Congruence Loss
Internal coherence no longer matches external reality.
Transgression
Coherence replaces congruence as the primary regulator.
Transgressive Persistence
Incongruent patterns become stabilized and self-reinforcing.
Evil
Systemic harm produced through persistent incongruence.
Civilizational Risk
Large-scale transgression threatens the persistence of civilization.
D. CONTEXTUAL INFLUENCES (ALWAYS CHANGING)
Ecological Change
Biological Change
Social Change
Technological Change
Cultural Change
Physical Change
Historical Change
KEY TO ARCHITECTURE
Foundational Emergence (Reality → Exclusion)
Pre-Reflective Organization (Organization → Generative)
Reflective Organization (Individual Scale)
Shared Organization (Social Scale)
Normative Organization (Ethical Scale)
Highest-Order Organization (Civilizational Scale)
THE CENTRAL ORGANIZATIONAL PRINCIPLE
Persistent organization depends on maintaining the dynamic balance between internal Coherence and external Congruence with changing context.
Success requires continual reflective revision.
THE CENTRAL WARNING
When coherence replaces congruence as the primary regulator, organization becomes progressively transgressive, and Evil emerges as the systemic expression of sustained Congruence Loss.
Prevention begins with early recognition and reflective correction.
THE CENTRAL HOPE
Through reflection, responsibility, ethics, science, and adaptive institutions, civilization can preserve congruence, enable flourishing, and sustain a good shared future.
Reflect, Revise, Restore, and Renew.
This architecture is not linear in time alone; feedback occurs at every level. Reflection can restore congruence. Neglect accelerates decline. The future of civilization depends on the choices we make together.

Supplementary Material S1 – Version 1.0 (2026)

Publications within the PSE Research Programme

Status and Purpose

This supplementary document provides the current publication record and development status of the PSE Research Programme.
The conceptual architecture of the programme is established in The PSE Research Programme:

- Foundational Charter—Architecture, Methodology and Research Strategy (PSE Monograph No. 1).
- The Canonical Glossary and Conceptual Dependency Map (PSE Monograph No. 1A).

Because the research programme continues to develop, publication status, version information, and access locations may change over time. These dynamic records are therefore maintained separately from the Foundational Charter.

The sequence below follows the conceptual dependency structure of the programme. Publication status does not necessarily indicate the chronological order in which research is conducted.

Published Monographs

Monograph No. 1

Stolting, H. C. J. (2026). The PSE Research Programme: Foundational Charter—Architecture, methodology and research strategy (PSE Monograph No. 1, Version 1.0). RoosterRiddle.

Status: Published
Version: 1.0
Publication year: 2026
Access: https://roosterriddle.com/documenten/Sources/Monograph1v1.pdf

Monograph No. 1A

Stolting, H. C. J. (2026). Canonical glossary and conceptual dependency map (PSE Monograph No. 1A, Version 1.0). RoosterRiddle.

Status: Published
Version: 1.0
Publication year: 2026
Access: https://roosterriddle.com/documenten/Sources/Monograph1Av1.pdf

Monograph No. 2

Stolting, H. C. J. (2026). Ontology of organization (PSE Monograph No. 2). RoosterRiddle.

Status: Published
Publication year: 2026
Access: https://roosterriddle.com/documenten/Sources/Monograph2v1.pdf

Monographs in Preparation

Monograph No. 3 — Biological Individuality

Stolting, H. C. J. Individuality in the context of Systematic Exclusion: A relational ontology of biological individuality (PSE Monograph No. 3). Manuscript in preparation.

Status: In Preparation

Monograph No. 4 — Reflective Organization

Stolting, H. C. J. Reflective organization and transgression (PSE Monograph No. 4). Manuscript in preparation.

Status: In Preparation

Planned Monographs

Monograph No. 5 — Consciousness

Consciousness in the Context of Systematic Exclusion

Status: Planned

Monograph No. 6 — Artificial Intelligence

Artificial Intelligence in the Context of Systematic Exclusion

Status: Planned

Monograph No. 7 — Institutions

Institutions in the Context of Systematic Exclusion

Status: Planned

Monograph No. 8 — Ethics

Ethics in the Context of Systematic Exclusion

Status: Planned

Monograph No. 9 — Attachment, Love and Social Cohesion

Attachment, Love and Social Cohesion in the Context of Systematic Exclusion

Status: Planned

Monograph No. 10 — Civilization and Cultural Evolution

Civilization and Cultural Evolution in the Context of Systematic Exclusion

Status: Planned

Programme Development

The monograph sequence represents the current conceptual architecture of the PSE Research Programme. It should not be interpreted as a fixed chronological publication schedule. Research may proceed simultaneously across different organizational domains, and findings developed in later-numbered studies may contribute to the refinement of monographs still in preparation.

Published monographs constitute the publicly accessible record of the programme at the version indicated. Monographs in preparation remain subject to substantive revision before publication. Planned monographs identify research directions established within the programme architecture but do not yet constitute completed theoretical frameworks.

Changes in publication status, version information, titles, and permanent access locations will be recorded in subsequent versions of this supplementary document.

Citation and Versioning

Individual PSE monographs should be cited according to the bibliographic information provided in their published versions.
Where a monograph has been revised after publication, the version number should be included where necessary to identify the specific text consulted.
The most recent version of this supplementary publication record should be consulted for the current status of the PSE Research Programme.