

STAGE AND STRUCTURAL-DEVELOPMENTAL THEORY

Adjacent and Organisationally Relevant

Argyris · Senge · Rooke & Torbert · Petrie · Eigel & Kuhnert · Laloux

PAPER 05 / 05

A Furtherance reference compendium on the intellectual terrain behind organisational design, executive capability, and leadership transformation.

The four preceding papers cover the principal theoretical traditions of vertical development. This final paper covers the figures who have done most to translate that theoretical work into operational practice in organisational settings – and a smaller number who built parallel frameworks that are genuinely complementary without belonging to any of the four camps.

Some of these figures are themselves theoretical contributors of the first rank (Argyris, Senge), but their primary intellectual centre of gravity is organisational learning rather than developmental psychology. Others are principally translators and applied researchers (Rooke and Torbert, Petrie, Eigel and Kuhnert) whose contribution has been to extend developmental thinking into executive practice. One (Laloux) provides the most consequential recent organisational application of Spiral Dynamics.

IN THIS PAPER

This is the camp you will encounter most often in the field. Senior executives, board chairs, and policy figures rarely cite Loevinger or Kegan directly; they will, however, recognise double-loop learning, the learning organisation, Teal organisations, and vertical leadership development.

Chris Argyris 1923–2013

American organisational theorist; James Bryant Conant Professor Emeritus, Harvard. Co-founder, with Donald Schön, of the field of organisational learning. Author of Organizational Learning (1978, with Schön), Theory in Practice (1974), Knowledge for Action (1993).

THEORY-IN-USE VS ESPOUSED THEORY

Individuals and organisations operate from two distinct theories: the **espoused theory** they describe when asked, and the **theory-in-use** actually governing their behaviour. The two routinely diverge, often in ways the actor cannot see. Most consequential organisational dysfunction, in Argyris's view, is the result of theory-in-use that is incompatible with the espoused theory but that the organisation cannot examine because doing so would breach its own defensive routines.

SINGLE-LOOP, DOUBLE-LOOP, AND TRIPLE-LOOP LEARNING

Loop	Question being asked	What is examined
Single-loop	Are we doing things right?	The actions; not the governing variables.
Double-loop	Are we doing the right things?	The governing variables, assumptions, frames behind the actions.
Triple-loop	How do we decide what is right?	The principles by which assumptions themselves are formed and revised.

Most organisations, Argyris argued, are structurally biased toward single-loop learning: they correct deviations from the norm but cannot examine the norm itself. The reason is that double-loop learning requires examining the very assumptions and identities that organisational members depend on for psychological safety.

MODEL I AND MODEL II

Argyris and Schön identified **Model I** as the dominant theory-in-use in Western organisations: govern by unilateral control, win and avoid losing, suppress negative feelings, behave rationally. Model I produces defensive routines that block double-loop learning. **Model II** – drawn from valid information, free and informed choice, internal commitment – supports double-loop learning but is rarely instantiated in practice without significant intervention.

LADDER OF INFERENCE

A diagnostic for surfacing the steps by which observable data is interpreted into beliefs and actions: from observed data, through selected data, interpretations, assumptions, conclusions, beliefs, and finally action. Each rung is a place where unexamined inference can introduce error.

SIGNIFICANCE

- The conceptual foundation of organisational-learning theory; the vocabulary Argyris created (defensive routines, espoused vs in-use, double-loop) is now standard.
- Direct intellectual ancestor of Senge's Fifth Discipline and of much of the action-research tradition.
- Argyris's writing style is rigorous to the point of being demanding, and his ideas have therefore had wider impact through his successors than through his own books.

Peter Senge b. 1947

American systems scientist; Senior Lecturer at the MIT Sloan School of Management; founding chair of the Society for Organizational Learning. Author of The Fifth Discipline (1990, revised 2006).

CORE CONTRIBUTION

Senge synthesised Argyris's organisational-learning research, Jay Forrester's system dynamics, and contemplative-practice traditions into the concept of the **learning organisation**: an organisation continually expanding its capacity to create the future it wants. The discipline architecture of the synthesis is laid out in five domains, with systems thinking – the 'fifth discipline' – as the integrating frame.

THE FIVE DISCIPLINES

Discipline	Focus
Personal mastery	Continual clarification of personal vision; concentration of energies; objective seeing of reality.
Mental models	Surfacing and examining the ingrained assumptions and generalisations through which we interpret the world.
Shared vision	Building a genuine sense of common purpose that goes beyond compliance to enrolment.
Team learning	Suspending assumptions in dialogue; thinking together rather than in parallel.
Systems thinking	Recognising patterns and feedback loops; seeing wholes rather than parts and snapshots.

SYSTEM ARCHETYPES

Senge popularised a set of recurring system structures – limits to growth, shifting the burden, tragedy of the commons, fixes that fail, success to the successful, and others – as diagnostic templates for recognising patterns of behaviour that arise from underlying feedback structures rather than from individual decisions. These are the practical shorthand by which senior executives most commonly engage with system dynamics.

SIGNIFICANCE

- The Fifth Discipline is one of the most widely read management books of the past forty years; the ‘learning organisation’ is now part of the standard vocabulary of executive practice.
- Senge's principal contribution is the integration of learning theory with system dynamics – bringing Forrester's quantitative tradition into managerial practice without requiring practitioners to become modellers.
- **Critique:** Empirical evidence that organisations explicitly adopting the five-disciplines framework outperform comparable organisations is mixed. The book is sometimes read as inspirational rather than as the structured curriculum Senge intended.

David Rooke & Bill Torbert *Seven Transformations*, 2005

Rooke is a British organisational consultant, founding partner of Harthill Consulting and Action Inquiry Associates; Torbert is Professor Emeritus at Boston College and the originator of the action-logics framework covered in Paper 02. Their joint Harvard Business Review article ‘Seven Transformations of Leadership’ (April 2005) is the principal applied-leadership exposition of the action-logics framework.

CORE ARGUMENT

Executives can be reliably classified by **action logic** – the developmental stage at which they typically interpret situations and choose responses. The seven action logics (Opportunist, Diplomat, Expert, Achiever, Individualist, Strategist, Alchemist) are not personality types but structural levels through which a person can progress with appropriate challenge and support. Each level confers distinctive capabilities and characteristic blind spots; the ceiling on the kind of organisational transformation an executive can lead is set by their action logic.

THE EMPIRICAL CLAIM

Drawing on Leadership Development Profile assessments of approximately 500 executives in five sectors, Rooke and Torbert reported the modal distribution and the differential frequency with which executives at each action logic led successful organisational transformations. The reported result was striking: while only roughly five percent of executives in their sample operated at Strategist or Alchemist, those executives led the substantial majority of successful transformations.

Action Logic	Share sampled	Characteristic strength	Characteristic limit
Opportunist	5%	Decisiveness in crisis	Distrust; manipulation.
Diplomat	12%	Group cohesion	Inability to handle conflict.
Expert	38%	Depth of technical mastery	Resistance to feedback on the self.
Achiever	30%	Reliable delivery	Fixed within current paradigm.
Individualist	10%	Awareness of competing frames	Difficulty with institutional discipline.
Strategist	4%	Leads transformation	Rare; requires sustained development.
Alchemist	1%	Catalyses civilisational reframings	Rarer; difficult to identify reliably.

Approximate distribution from Rooke and Torbert's published 2005 sample. The principal finding – that transformational success concentrates at the Strategist and Alchemist logics – is the most-cited empirical result in applied vertical leadership development.

SIGNIFICANCE

- The HBR article remains the most widely circulated single piece of evidence connecting developmental level to consequential business outcomes. It is the form in which most senior executives encounter the action-logics framework.
- Rooke and Torbert's insistence that action logics can change with appropriate developmental work – rather than being innate – opened the field to executive coaching as a developmental rather than purely skill-based intervention.
- **Critique:** The 2005 sample is observational; the absence of a control for selection effects (executives who commission a developmental assessment may differ systematically from those who do not) limits the strength of causal inference.

Nick Petrie Centre for Creative Leadership

*New Zealand-born senior faculty at the Centre for Creative Leadership (CCL), one of the largest leadership-development institutions in the world. Author of CCL's white papers *Future Trends in Leadership Development* (2011, updated 2014) and *The How-To of Vertical Leadership Development* (2014, 2015).*

CORE CONTRIBUTION

Petrie's principal contribution has been to introduce vertical-development vocabulary into the corporate leadership-development industry in a form senior HR functions can implement. The CCL white papers distil thirty years of academic developmental research – Loevinger, Kegan, Cook-Greuter, Torbert – into a framework of three conditions for vertical growth, delivered in a length and tone designed for executive consumption.

THE THREE CONDITIONS FOR VERTICAL DEVELOPMENT

Condition	Role	Practical translation
Heat experiences	Disequilibrium	Stretch assignments and adaptive challenges that exceed current capability.
Colliding perspectives	Disorientation	Exposure to genuinely different worldviews that disturb the current frame.
Elevated sense-making	Integration	Reflective practices, coaches, communities of practice that help reorganise.

HORIZONTAL VS VERTICAL DEVELOPMENT

Petrie's clearest framing – and the contribution most often quoted in corporate leadership-development discussions – is the distinction between **horizontal development** (adding more knowledge, skills, and competencies at the current developmental level) and **vertical development** (progression to a structurally more complex level of meaning-making). Most corporate leadership programmes, Petrie argues, deliver horizontal development almost exclusively, while the demands of senior leadership typically require vertical development.

SIGNIFICANCE

- Petrie and CCL provided the bridge through which Kegan's and Cook-Greuter's academic work entered the mainstream of corporate leadership development.
- The horizontal / vertical distinction is the most widely deployed shorthand for the developmental claim in HR and learning-and-development settings.
- The white papers themselves are short, accessible, and designed for circulation to executive sponsors – the model for how serious developmental ideas can be made operational without losing structure.

Keith Eigel & Karl Kuhnert 1998 · 2008

American organisational psychologists; Kuhnert is Professor of Industrial-Organisational Psychology at the University of Georgia; Eigel is founder of Leaders Lyceum and a corporate practitioner. Their joint research extended Kegan's constructive-developmental framework into the empirical study of CEO performance.

CORE CONTRIBUTION

Eigel and Kuhnert's research applied Kegan's Subject-Object Interview to samples of senior executives and tested whether developmental level – specifically the proportion of leaders operating at Order 4 (Self-Authoring) or higher – predicted measurable performance differences. The headline finding from their published studies is that developmental level predicts CEO and senior-executive performance ratings more strongly than many of the personality and competency variables traditionally used in executive selection.

METHOD AND FINDINGS

Their principal study (Eigel, 1998; Kuhnert and Eigel, 2008) sampled twenty-one senior executives drawn from a single industrial sector. Each was assessed using the Subject-Object Interview, scored independently by trained scorers, and rated for performance by superiors, peers, and direct reports. The reported correlation between developmental level and aggregated performance ratings was substantially higher than is typically reported for personality measures in leadership research.

SIGNIFICANCE AND CRITIQUE

- One of the few studies to provide quantitative empirical support for the applied claim that developmental level predicts senior-leadership performance.
- Substantially smaller sample than Rooke and Torbert; results have been cited extensively but independent replication remains limited.
- **Critique:** Sample size, single-sector design, and the labour-intensive nature of Subject-Object Interview scoring all constrain generalisability. The work is best read as a proof-of-principle that the developmental-performance link can be demonstrated, rather than as a definitive empirical settlement.

Frederic Laloux b. 1969

Belgian-American organisational researcher; former associate partner at McKinsey. Author of Reinventing Organizations (2014). His work is the principal recent application of Spiral Dynamics to organisational form.

CORE THESIS

Organisational forms have evolved through a sequence of stages – labelled by Spiral Dynamics colours – each of which represents a qualitatively distinct way of organising authority, structure, and purpose. Each stage emerged in response to the limits of the previous one and includes capabilities the previous one lacked. Laloux argues that a small but growing number of organisations now operate at the **Teal** stage – organisations characterised by self-management, wholeness, and evolutionary purpose – and that this represents the next developmental step for organisations as a class.

THE COLOUR-CODED STAGES OF ORGANISATIONS

Colour	Stage	Defining metaphor	Example forms
Red	Impulsive	Wolf pack	Street gangs; mafias.
Amber	Conformist	Army	Catholic Church; military; most government.
Orange	Achievement	Machine	Multinational corporations; Wall Street.
Green	Pluralistic	Family	Culture-driven companies; Patagonia, Ben & Jerry's.
Teal	Evolutionary	Living system	Self-managing organisations; Buurtzorg, Morning Star, Patagonia (parts).

THE THREE BREAKTHROUGHS OF TEAL

- **Self-management:** peer-to-peer relationships replace traditional hierarchies of authority; decisions are made through advice processes rather than command.
- **Wholeness:** employees are encouraged to bring their whole selves to work – emotional, intuitive, and spiritual dimensions, not only professional roles.
- **Evolutionary purpose:** the organisation is treated as having its own purpose to discover and serve, distinct from shareholder value or the owner's preferences.

METHODOLOGY

Laloux's empirical method was case-study analysis of approximately twelve organisations identified as operating with Teal characteristics, supplemented by interviews with founders and members. The book is therefore best understood as a structured field study rather than a controlled comparative analysis. Laloux's framing of the case-study findings is explicitly developmental, drawing on Wilber and Spiral Dynamics.

SIGNIFICANCE AND CRITIQUE

- Reinventing Organizations is the single most widely circulated application of vertical-developmental thinking to organisational form. The Teal vocabulary has become standard in self-management circles and in parts of the corporate transformation industry.
- The book has been particularly influential in healthcare (Buurtzorg has since become a global reference case), in software companies, and in purpose-driven enterprises.
- **Critique:** The case-study sample is small and self-selected; the claim that Teal organisations outperform on conventional measures is contested. Sustained Teal operation under competitive market pressure has proved harder than the book suggested. Laloux's reliance on Wilber's framework imports the latter's reputational risks for empirically disciplined audiences.

Synthesis

	Centre of gravity	Theoretical lineage	Empirical grounding	Primary instrument
Argyris	Org. learning theory	Schön; Lewin	Strong qualitative	Theory-of-action analysis
Senge	Systems thinking + learning	Forrester; Argyris	Mixed	System archetypes
Rooke & Torbert	Applied action logics	Loevinger via Torbert	Observational, n≈500	Leadership Development Profile
Petrie / CCL	Corporate L&D translation	Kegan; Cook-Greuter	Practitioner synthesis	Heat / colliding / sense-making
Eigel & Kuhnert	Empirical CEO research	Kegan	Quantitative, n=21	Subject-Object Interview
Laloux	Org. form (Teal)	Wilber; Spiral Dynamics	Case study, n≈12	Case-study taxonomy

The figures in this paper occupy the operational layer of vertical development – the layer at which the theoretical architectures of the preceding four papers meet the realities of organisational and executive practice. They do not, with the partial exception of Argyris and Senge, constitute new theoretical traditions; they translate, extend, and apply.

For the Fractional COO working at the level of organisational design, leadership transformation, or governance, this layer is in many respects the most consequential of the five. It is the layer at which the abstract claims of developmental psychology become defensible interventions. Argyris's distinction between espoused theory and theory-in-use is independently useful in any analysis of organisational or governmental behaviour. Senge's archetypes are diagnostic templates of the first

order. Rooke and Torbert's evidence – for all its methodological limits – is the strongest available link between developmental level and executive performance in transformational contexts. Petrie's vocabulary is the lingua franca of corporate leadership development. Eigel and Kuhnert's findings remain the closest thing the field has to quantitative validation. Laloux's framework, used carefully, names organisational forms that other vocabularies cannot.

A NOTE ON EVIDENCE

The discipline of using this material well is to draw on the operational vocabulary while remaining aware of the underlying theoretical traditions and their respective epistemic statuses. Argyris and Kegan are not Spiral Dynamics; Senge is not Wilber. Conflating them, as the corporate-transformation literature sometimes does, is the failure mode against which serious operators must guard.

Closing note on the working-paper series

These five papers cover the principal traditions of vertical-development theory and its applied translation. They are intended as a single reference compendium rather than as five independent documents: each paper assumes the others, and the synthesis sections of papers 01–04 establish the conceptual scaffolding on which paper 05 rests.

FOR THE OPERATOR

This is the terrain Furtherance works across whenever the question on the table is organisational: what a role genuinely demands, who can hold it, and how structure, leadership, and judgement fit together as a business scales. The five-camp architecture gives that work a common frame – a way to locate, compare, and weigh capability claims, developmental claims, and transformational claims rather than taking them on trust. No single tradition exhausts the territory. Recognising which tradition a given claim derives from, and what epistemic status it carries, is itself part of the discipline a Fractional COO brings to the decision layer.