Living Systems Leadership:

Knowing When to Command and When to Release

The biological case for intelligent regulation in leadership

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Most leaders do not set out to harm the people they lead. They set out to perform. To deliver. To meet the targets that the organisation has placed in front of them. And in doing so, many of them cause damage they never intended and never see - because the systems they operate in reward output, not the conditions that make output sustainable.

This essay is about that gap. It is about what happens when organisations are governed as if they were machines, and what becomes possible when leaders understand that they are, in fact, responsible for living systems - systems with biological requirements that cannot be ignored without consequence.

It is also about a specific and underappreciated failure: the failure to regulate. Not the failure to decide or to deliver, but the failure to maintain the conditions under which the people inside the system can continue to think, connect, recover, and produce intelligent work together. That failure has a name. And it shows up, eventually, in the bodies of the people the leader was supposed to be leading.

He Was Regarded as Effective

Results came in on time. The department met its targets. Upward, he was seen as a strong performer - demanding, yes, but that was often taken as evidence of high standards. The organisation rewarded him for what he produced.

What the organisation did not measure was what he was doing to the living system around him.

He managed people the way he managed things. He allocated them, scheduled them, pushed them, and expected them to cope. When they struggled, he increased pressure. When they raised concerns, he heard weakness. When they flagged overload, he heard excuses. He centralised decisions not because the situation required it, but because he did not trust the people beneath him to think. He confused control with leadership.

Over time, the department began to fray. Not visibly at first. The numbers still looked acceptable. But coherence was falling. Psychological safety had collapsed. People were exhausted and not recovering. The most junior members of the team were carrying the highest load, with the least protection and the least voice. Several left. Others stayed and deteriorated quietly.

Eventually, burnout became visible. And when it did, the organisation responded in the way most organisations respond: it asked the burned-out individuals what they needed to become more resilient.

It did not ask what the leader had done to the system.

The Organisation Is Biological

There is a question that most organisations never ask, not because it is unimportant, but because it has become invisible: what kind of thing do we think we are leading?

The answer most leaders carry, not in words but in behaviour, is a machine. Something that can be driven harder when output falls short. Something that responds predictably to pressure. Something that, when it breaks, can be repaired by replacing the broken part.

But an organisation is not a machine. It is a living system. The buildings, reporting lines, governance frameworks and scorecards do not make it work. People do. Living people, with nervous systems and histories, with bodies that need rest, with emotions that respond to threat and safety, with relationships that carry trust or fear, with biological limits that no amount of pressure can permanently override.

These people form teams. Teams develop patterns of trust and local culture. They coordinate, adapt, protect, resist, innovate, and sometimes collapse. The real organisation is not the organogram on the wall. It is the living network of human beings doing the work.

When leaders see only the structure and not the organism - the roles and not the human beings, the outputs and not the biological cost of producing them - they begin to manage people as if they were things. That is one of the earliest signs of organisational toxicity. And it is rarely recognised until the damage is already underway.

Output Is Not the Same as Yield

When people are managed like things, leaders make a dangerous assumption. They assume that output is the same as yield.

It is not.

Output is what the system produces. Yield is what the system produces sustainably, intelligently, and biologically - without destroying the conditions that make future output possible.

A machine can be driven harder until it fails. A living system must be regulated. Maximum output can be achieved for a while through pressure, fear, overwork and control. But this is not high yield. It is extraction. And extraction, applied long enough to a living system, produces a predictable outcome: burnout.

Burnout: Look to the System First

When burnout appears, the instinct is to look at the individual. The person must become more resilient - sleep more, exercise more, create better boundaries, find the strength to function inside a system that continues to overwhelm them.

Individual resilience does matter. People differ in their biological reserve, their coping capacity, their ability to recover under load. But when we reach too quickly for individual explanations, we consistently miss the more important question.

When one person burns out, we might reasonably ask what that individual was carrying. When many people burn out - across a team, a department, a profession - the explanation cannot be individual. At that point, the evidence points clearly toward the system. The system is the common variable. It is generating the conditions in which collapse becomes probable. It is telling us, through the bodies of the people inside it, that something has gone wrong with its regulation.

What leaders often miss is this: the most resilient people in a broken system do not escape burnout.

They simply burn out last.

Resilience determines the sequence, not the outcome. If the system remains extractive long enough, everyone eventually crosses the threshold. People escape only in two ways: they leave - which is why toxic systems generate chronic turnover - or they get promoted, moving out of the zone of highest exposure into leadership positions where they now regulate others rather than absorb the impact of poor regulation themselves.

This is why burnout consistently shows a steep hierarchical gradient. The more junior the person, the higher the burden. The people at the bottom carry the most, with the least protection and the least voice.

And we must be frank about something that leadership conversations rarely name directly: it is often leaders themselves who generate the toxicity that flows downward. They are insulated from its effects precisely because they are its source. The numbers look acceptable from where they stand. They usually do. That is exactly why the system needs to measure something other than numbers.

The Body Knows

To understand what leadership in a living system actually requires, start not with an organisation chart but with the human body.

The body is a living system of extraordinary sophistication. The liver regulates metabolism without asking for permission. The immune system identifies and responds to threats without central approval. The gut, the heart, the endocrine system - each carries its own intelligence, its own responsiveness, its own capacity to act.

And yet the body is also capable of total central command.

When a genuine threat arrives - sudden, acute, potentially fatal - the brain does not pause for consultation. The sympathetic nervous system activates within seconds. Blood is shunted away from non-essential systems: digestion slows, blood flow to the skin reduces, the gut quiets. Resources are redirected with precision toward what survival requires: the brain sharpens, the cardiovascular system accelerates, the musculature is primed for action. The organism centralises completely, rapidly, and intelligently around a single imperative: survive this.

This is not aggression. It is biological necessity. The fight response is a precisely calibrated executive action triggered by an accurate reading of genuine threat. Every resource is mobilised. Every system is coordinated. The organism acts as one.

And then - when the threat passes - the body decentralises again. Digestion resumes. Repair begins. The immune system rebalances. Creativity returns. Social engagement re-emerges. The parasympathetic nervous system restores the conditions for growth, learning, connection and recovery. Local intelligence is handed back to local systems. The centre releases - not because it is kind, but because permanent central control is biologically unsustainable. A body that remained in sympathetic overdrive indefinitely would not be high-performing. It would be inflamed, exhausted, and progressively destroying itself.

The body does not choose between centralisation and decentralisation as a matter of philosophy. It moves between them continuously, fluidly, and with precision - governed at every moment by a single question: what does this organism need right now?

Two Leadership Cultures, Two Failure Modes

Leadership thinking over the past several decades has been dominated by a necessary corrective. The hierarchical, authoritarian, command-and-control models that characterised much of twentieth-century management produced real harm: suppressed intelligence, disengaged people, psychological damage, and organisations too rigid to adapt. The response - a shift toward flatter structures, collaborative decision-making,

distributed authority, psychological safety, and servant leadership - was not wrong. It addressed genuine pathology with genuine insight.

But every corrective, applied without biological intelligence, risks becoming its own pathology.

We now have two dominant leadership failure modes, not one. And organisations today are vulnerable to both.

The first is the failure of over-centralisation. The leader who never releases. Who pulls every decision upward out of anxiety, distrust, or the need for control. Under this leader, the exception becomes the culture. The crisis structure becomes the operating model. Local intelligence is suppressed. Initiative declines. People stop thinking and start complying. And over time, the organisation loses the one thing that sustained high yield requires: the capacity to think from within.

The second failure mode receives far less attention, but it is equally dangerous. It is the failure of leaders who cannot centralise when the moment genuinely demands it. Who have internalised the language of collaboration and distributed decision-making so completely that they are unable to take command when the threat is real, imminent, and requires a swift, coordinated, executive response. Who consult when they should be deciding. Who facilitate conversation when the building is on fire.

This failure is particularly common in organisations that have made psychological safety and collaborative culture genuine values - which is not a criticism of those values. It is an observation that any regulatory strategy, applied without salience, becomes a liability. A leader trained to avoid centralisation as a form of toxicity may find themselves unable to distinguish between control that suppresses and command that saves. And when the threat arrives, the system is left without a regulator at precisely the moment it needs one most.

The team whose leader cannot step forward in a crisis does not experience psychological safety. It experiences abandonment.

The organisation that disperses authority during genuine systemic threat does not benefit from distributed intelligence. It fragments.

What Each Failure Does to the Living System

The two failure modes produce different symptoms, but both ultimately destroy what a living system needs most: the ability to regulate itself intelligently under varying conditions.

Toxic centralisation produces fear. People learn that initiative is dangerous, that speaking is risky, that judgment is unwelcome. They comply rather than contribute. The organisation continues to produce output - for a while - but does so by progressively

consuming the very human capacity that makes intelligent output possible. It extracts rather than cultivates.

Toxic decentralisation in moments of genuine crisis produces a different kind of damage. Confusion spreads because no one is reading the whole system. Decisions that require a single coordinating intelligence get fragmented across multiple partial perspectives. The threat grows while the organisation discusses it. Trust in leadership erodes - not because the leader was cruel, but because the leader was absent at the moment that mattered. People do not feel free. They feel unprotected. And that gap becomes a wound in the fabric of the organisation that outlasts the crisis itself.

Both failures are, at their root, the same failure: a failure of biological literacy. A failure to understand that living systems require continuous, intelligent regulation - not a fixed preference for one mode of governance, but the capacity to read what the organism needs and to respond with precision.

Salience: The Governing Intelligence

Salience is the capacity to read what matters most in this moment. In the human nervous system, the salience network is among the most critical regulatory systems in the brain. It does not process all incoming information equally. It filters, prioritises, and directs attention and resources toward what is most consequential right now. Without accurate salience, the organism cannot regulate itself. It either overreacts to everything or fails to respond to genuine threats. Both are dangerous.

Organisational leadership requires the equivalent capacity. The leader must be able to read the living system accurately and continuously - not through dashboards alone, but through the quality of relationships, the level of coherence, the energy of people, the signals that something is beginning to fail long before it appears in the output data.

And then the leader must act on what they read. Salience is not only detection. It is detection plus response.

Sometimes the answer is autonomy. Give the team room to think, to own the problem, to activate the local intelligence that only exists close to the work. Trust the distributed system. Release control.

Sometimes the answer is command. Read the threat. Take the centre. Mobilise resources. Make the decision. Coordinate the whole system around a single imperative. Act with speed and precision. And then - when the threat has passed - release again.

Poor leaders centralise because they are anxious or self-centred. Healthy leaders centralise because the system genuinely requires coordination.

Poor leaders decentralise because they want to avoid responsibility or want everyone to feel heard. Healthy leaders decentralise because local distributed intelligence must be activated.

The difference is not structural. It is not cultural. It is biological. It lives in the leader's capacity to read the organism they are responsible for - and to regulate it, continuously, with the precision that living systems require.

The Same Principle at Every Scale

What makes this framework genuinely compelling - and what many leaders find both surprising and clarifying when they encounter it - is that this is not a metaphor.

The oscillation between centralisation and decentralisation, between command and release, is not something organisations borrowed from biology as a useful analogy. It is the same principle operating at a larger scale of life.

A cell regulates its internal environment through constant dynamic adjustment between centralised genetic instruction and decentralised local chemistry. A body regulates itself through the continuous interplay of central nervous system coordination and local organ autonomy. A team, a department, an organisation - each is a living system at a larger scale, governed by the same functional logic.

The leader who understands this does not simply manage differently. They see differently. They see the organisation not as a structure to be optimised but as a living system to be regulated. They see people not as resources to be deployed but as biological organisms whose capacity to produce intelligent yield depends on conditions that must be actively maintained. They see their own role not as the heroic decision-maker at the top of a hierarchy, nor as the facilitative servant who disperses all authority downward, but as the biological regulator of a living system.

Toxic Systems Allow Toxic Leadership to Endure

A toxic system is not merely a system that contains a toxic person. All systems contain difficult people.

A toxic system is one that allows toxic leadership to persist without correction. It rewards output while ignoring harm. It promotes people for productivity without evaluating their effect on the living system around them. It measures KPIs but not psychological safety. It tolerates fear because the numbers still look acceptable. It asks burned-out people to become more resilient, rather than asking why so many of them are burning out.

This is why leadership development cannot be reduced to personality work alone. Yes, individual leaders must develop self-awareness, empathy, and the capacity to listen. But

that is not sufficient. Organisations must also redesign what they reward, what they measure, what they tolerate, and what they call success.

If a system rewards leaders for extracting output while ignoring the depletion of people, it will continue to produce extractive leadership. Poorly regulated systems eventually produce toxic leadership, regardless of the intentions of the individuals within them.

What Intelligent Leadership Actually Looks Like

Leadership is not a philosophy of control. It is not a philosophy of flatness. It is the continuous, biologically intelligent regulation of a living system - moving between command and release with the precision that the organism requires.

A leader who understands this asks different questions. Not only what decisions must I make, but:

> *Where is demand exceeding adaptive capacity?*
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> *Where is coherence falling apart?*
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> *Where has psychological safety been lost?*
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> *Where is energy being consumed faster than it is being restored?*
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> *Where is centralisation now suppressing the intelligence the system needs?*
>
> *Where is decentralisation premature because the moment genuinely requires command?*
>
> *What does this living system need right now in order to produce healthy yield?*

The organisations that will thrive are not the ones that centralise everything, nor the ones that decentralise everything. They are the ones that learn to move intelligently between the two - regulating demand instead of simply increasing pressure, building coherence instead of relying on compliance, protecting psychological safety so the system can access its own intelligence, sustaining the biological rhythms that allow people to remain capable of contributing.

The leader is not the heroic controller. The leader is not the machine operator. The leader is a biological regulator of a living system - responsible for reading the organism and maintaining the conditions under which it can remain alive, coherent, and genuinely capable.

High yield is not produced by extraction. It is produced by regulation.

That is how living systems remain alive.

That is how organisations become intelligent.

And that is how leadership must evolve.

About the Author

Dr Etienne van der Walt, MD, is a neurologist, entrepreneur, global keynote speaker and living systems thinker whose work sits at the intersection of neuroscience, biology and leadership. As the founder of Neurozone, he has spent more than two decades developing evidence-informed frameworks that help leaders and organisations improve resilience, wellbeing and sustainable performance. His work challenges traditional mechanistic approaches to leadership by viewing organisations as living systems that require intelligent biological regulation rather than increasing control. He is the author of *To Emerge* and writes and speaks internationally on resilience, leadership, organisational health and the science of human flourishing.

For more essays and resources, visit www.etiennevanderwalt.com.

Further Reading

The following texts provide the scientific and conceptual foundations for the ideas in this essay, selected for a leadership readership - serious enough to reward careful attention, accessible enough not to require a background in biology or neuroscience.

On Burnout

Maslach, C., & Leiter, M. P. (1997). The Truth About Burnout: How Organizations Cause Personal Stress and What to Do About It. Jossey-Bass. - The foundational text establishing burnout as an organisational failure, not an individual one. Maslach's six domains of work life remain the most rigorous framework for identifying systemic drivers of burnout.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job burnout. Annual Review of Psychology, 52, 397–422. - A comprehensive review of three decades of burnout research. Essential for understanding the evidence base.

Shanafelt, T. D., & Noseworthy, J. H. (2017). Executive leadership and physician well-being: Nine organisational strategies to promote engagement and reduce burnout. Mayo

Clinic Proceedings, 92(1), 129–146. - Frames burnout prevention as a direct leadership responsibility in high-demand professional environments.

On Resilience

Southwick, S. M., & Charney, D. S. (2012). Resilience: The Science of Mastering Life's Greatest Challenges. Cambridge University Press. - A rigorous and readable account of the neuroscience and psychology of resilience, covering biological, relational and meaning-based dimensions of adaptive capacity.

Bonanno, G. A. (2004). Loss, trauma, and human resilience. American Psychologist, 59(1), 20–28. - A landmark paper reframing resilience from exception to norm, with significant implications for how we understand adaptive capacity under extreme demand.

Epel, E. S., & Lithgow, G. J. (2014). Stress biology and aging mechanisms. The Journals of Gerontology, 69(S1), S10–S16. - Examines how biological stress responses relate to long-term resilience and health, bridging individual biology and systemic demand.

On Biological Regulation and Stress

Sterling, P., & Eyer, J. (1988). Allostasis: A new paradigm to explain arousal pathology. In S. Fisher & J. Reason (Eds.), Handbook of Life Stress, Cognition and Health. Wiley. - The original formulation of allostasis - stability through change - which underpins the biological framework used throughout this essay.

McEwen, B. S. (1998). Stress, adaptation, and disease: Allostasis and allostatic load. Annals of the New York Academy of Sciences, 840, 33–44. - Directly relevant to understanding what sustained high-pressure environments do to the human organism over time.

Sapolsky, R. M. (2004). Why Zebras Don't Get Ulcers (3rd ed.). Henry Holt. - The most accessible account of stress biology available. Essential reading for any leader who wants to understand what chronic stress actually does to the people in their care.

On Organisational Performance and Living Systems

Edmondson, A. C. (2018). The Fearless Organization: Creating Psychological Safety in the Workplace for Learning, Innovation, and Growth. Wiley. - The definitive account of psychological safety as a performance variable. Safety is not soft: it is the precondition for intelligence in high-stakes environments.

Senge, P. M. (1990). The Fifth Discipline: The Art and Practice of the Learning Organization. Doubleday. - The foundational text for systems thinking applied to organisations.

Stacey, R. D. (2010). Complexity and Organizational Reality. Routledge. - A rigorous challenge to mechanistic management models from a complexity science perspective.

Wheatley, M. J. (1992). Leadership and the New Science: Discovering Order in a Chaotic World. Berrett-Koehler. - An early and influential application of biology, quantum physics and chaos theory to organisational leadership. Accessible and generative.