### From Organizational Tensions to Algorithmic Intelligence: Why Self-Management Practices Are More Valuable Than We Realized

A synthesis prompted with love • Thomas Thomison

For years, those of us in the Holacracy and self-management communities have been practicing something profound without fully realizing its broader implications. We've been developing a muscle that may be the key to thriving in the coming age of artificial intelligence: the ability to process tensions.

## **Redefining Intelligence for a New Era**

After extensive research synthesizing perspectives from computational science, biology, psychology, and organizational theory, I've arrived at what I believe is a unifying definition of intelligence:

Intelligence is the capacity to navigate and optimize within complex tension spaces by continuously identifying, engaging, and resolving discrepancies, conflicts, or challenges as opportunities for growth and innovation.

This definition isn't just academic—it has profound implications for how we think about human capabilities, organizational design, and the development of artificial intelligence. Most importantly, it validates what many of us have been practicing through frameworks like Holacracy: the systematic processing of tensions as a path to greater collective intelligence.

## **From Problem-Solving to Tension Processing**

Traditional views of intelligence often focus on problem-solving: the ability to overcome discrete challenges with clear endpoints. But this new framework suggests something more dynamic and continuous. Intelligence isn't just about solving isolated problems; it's about:

- 1. **Continuous sensing and adaptation** Perpetually scanning for discrepancies between current and desired states
- 2. **Optimization in complex spaces** Navigating trade-offs between multiple competing objectives
- 3. **Innovation through creative tension** Using discrepancies as fuel for growth rather than mere obstacles

Sound familiar? This is precisely what we do in Holacracy when we identify tensions, bring them to governance or tactical meetings, and process them into organizational changes.

# **The Science Behind Tension Processing**

This redefinition is supported by diverse scientific perspectives:

#### From Biology

Michael Levin's <u>fascinating TED talk on how bodies and minds are built</u> shows that even at the cellular level, life functions through a form of tension processing. Cells detect "gaps" between injured and healthy states and compute pathways to close those gaps. In his accessible presentations, Levin demonstrates how biological tissues exhibit problem-solving abilities without neural networks, suggesting that intelligence, at its core, is an emergent property that begins at the most fundamental levels of life.

#### **From Cognitive Science**

Joscha Bach defines intelligence as <u>"the ability to make models"</u> that serve decision-making and control. In his illuminating talks on cognitive architectures, Bach explains how intelligent systems constantly work to reduce the gap between their internal models and reality—essentially processing the tension between what they predict and what they observe. This ongoing resolution of discrepancies is what makes a system truly intelligent rather than merely computational. Intelligence, in Bach's framework, is fundamentally about detecting and resolving these tensions between model and reality.

#### From AI Research

Kenneth Stanley's work on evolutionary algorithms demonstrates that innovation often comes from exploring tensions rather than pursuing single-minded goals. In his book <u>Why Greatness</u> <u>Cannot Be Planned</u>, he shows how an algorithm fixated solely on one objective often gets stuck in local optima, while those that explore "interesting" deviations discover novel solutions.

## The Human Dimension

This perspective also aligns beautifully with what we know about human intelligence:

- Howard Gardner's Multiple Intelligences theory shows us that tension processing occurs across different domains (linguistic, spatial, interpersonal, etc.)
- Robert Sternberg's Triarchic Theory illustrates how analytical, creative, and practical intelligences work together to resolve different types of tensions
- Daniel Goleman's Emotional Intelligence framework highlights how self-awareness and social awareness are fundamentally about detecting emotional tensions within ourselves and in our relationships

## Holacracy as Applied Collective Intelligence

This brings me to why I'm so excited to share this with the Holacracy and self-management communities. What we've been practicing is, in essence, a system of applied collective intelligence.

When Holacracy defines a tension as "a gap between current reality and a potential you sense," it's not just offering a management practice—it's tapping into the fundamental nature of

intelligence itself. Every governance meeting where we process tensions is an exercise in collective intelligence, turning organizational frictions into evolutionary momentum.

The power of Holacracy lies in how it:

- 1. Creates **structures** that route tensions to appropriate processors
- 2. Cultivates **awareness** by empowering everyone to sense tensions
- 3. Distributes **agency** so tensions can be resolved close to where they're detected
- 4. Provides **clarity** through explicit roles and accountabilities

These elements mirror what emerging research suggests are the core components of intelligent systems, whether biological, computational, or organizational.

# PowerShift® and the Path to Algorithmic Organizations

This framework also helps us understand the deeper significance of the PowerShift® Principles. The PowerShift ecosystem is essentially designing for tension processing at scale, creating the conditions for distributed intelligence across human-AI networks.

As we look toward what OpenAI has termed "Level 5 AGI" (AI systems <u>capable of running entire</u> <u>organizations independently</u>), we can see that the skills we've been developing in self-managed organizations are precisely what such systems will need to master. An algorithmic organization would need to:

- Detect tensions across all aspects of operations
- Process those tensions through appropriate pathways
- Balance multiple competing objectives
- Learn and adapt from each resolution
- Maintain alignment with human values and purposes

The path from today's Holacracy practice to tomorrow's algorithmic organizations isn't as distant as it might seem. We're already building the patterns of collective intelligence that more advanced AI systems will need to embody.

## What This Means For You

If you're already practicing Holacracy or similar self-management approaches, you're developing crucial capabilities for the future:

- 1. You're becoming fluent in tension processing the fundamental activity of intelligence
- 2. You're learning to navigate **complex adaptive systems** rather than just managing complicated ones
- 3. You're embodying the **distributed awareness** that will characterize successful human-AI collaboration

Those skills won't become obsolete in an age of advanced AI—they'll become even more valuable as the pace of change accelerates and the complexity of our challenges increases.

## **Moving Forward Together**

This redefinition of intelligence isn't just theoretical—it offers a practical path forward for both human and artificial intelligence development. By recognizing tension processing as the core of intelligence, we can:

- Design better organizational systems that amplify collective intelligence
- Create more effective human-AI interfaces that leverage our complementary strengths
- Develop AI systems that embody the full spectrum of intelligence, not just narrow problem-solving

I believe those of us in the Holacracy and self-management communities have been pioneers—sometimes unknowingly—in developing practices that will be essential in the coming age of intelligence. The years we've spent learning to process tensions effectively are preparing us to be bridges between today's organizational forms and the algorithmic organizations of tomorrow.

Rather than fearing the rise of artificial intelligence, we can recognize that we've been developing exactly the skills needed to partner with it effectively. Our practice of tension processing isn't just a management technique—it's the fundamental activity of intelligence itself, and a bridge to our collective future.

I'm excited to continue exploring these connections and would love to hear your thoughts and experiences. How has your practice of tension processing shaped your understanding of intelligence? What implications do you see for the future of work and organization?

This blog post is based on extensive research synthesizing perspectives from computational science, biology, psychology, and organizational theory. For a deeper exploration of these concepts, I recommend exploring the work of <u>Michael Levin's TED talk on biological intelligence</u>, <u>Joscha Bach on cognitive architectures and model-building</u>, <u>Kenneth Stanley's book "Why</u> <u>Greatness Cannot Be Planned"</u>, and <u>Brian Robertson's work on Holacracy</u>.