Systems Intelligence

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Raimo P. Hämäläinen

Esa Saarinen

Systems Analysis Laboratory
Helsinki University of Technology

Themes

1. Positive Systems Thinking
2. Systems Intelligence Archetypes
3. Details: Why They Count
4. Systems of Holding Back
5. Three levels of Systems Intelligence
6. Microbehaviors
7. Knowledge is Not Power

Systems Intelligence

or: Making apparent what we do anyway

- Emphasis on **agency in systems**
- Emphasis on possibilities, hidden potentials, abundance, and celebration of life
- Calling for realistic optimism and finding its aspiration from the fundamentals of the **human experience**
- Combining The Fifth Discipline and Presence with the Ancient Promise of Philosophy to contribute to the cause of **the Good Life**

"System" of Systems Intelligence

- **An interconnected whole** of human agents
- Emphasis on the human element, particularly in its invisible, symbolic, emotional, interpretational, meaning-intensive aspects
- **System is characterized by what it generates**
- System generates thoughts, actions, behaviors, experiences, lifeforms, etc.
- Emphasis on the possibility of more life-enhancing systems
- **"System" of Systems Intelligence = Human System**
- Intelligence in systems that involve human subjectivism

Positive Systems Scholarship

- Systems Intelligence as focusing on phenomena on positive deviance, human flourishing and sense of life
- Parallel in orientation to:
  - Positive Organization Scholarship and Positive Psychology
  - C. Alexander's
    "The Phenomenon of Life"-project
    http://www.natureoforder.com/

Positive Systems Thinking

- The idea is not to emphasize the various ways in which our systems thinking is faulty, but to **focus on where we get it right**

- …and can succeed even better

- Given that systems are everywhere, and given that we are systems intelligent, how can we create a better immediate context and a better world

The Word "Systems Intelligence"

- Is easily accessible
- Is an encouraging route for the enginering mind to human, subjective, emotional, interpersonal, interactional and sensitivity-as-you-act issues
- Primarily a communicative concept, rather than disciplinary

Systems Potential

- Wherever there is s "system", there is also the possibility of a
  more enriching,
  more inspiring,
  more life-enhancing system
- Systems intelligence is based on the systems potential of any system

Meta/Mega Purposes of Life

- "Systems are defined by the fact that their elements have a common purpose and behave in common ways precisely because they are interrelated toward that purpose" (Dance of Chage, p. 137, Lexicon).
- Systems Intelligence is based on the humanly fundamental Meta/Mega Purposes of Life.
- The Meta/Mega Purposes of Life include Hope, Meaningfulness, Connectivity, Love, Acceptance, Transencendence, and can be found in all spiritual traditions East or West. They are **part of meaningful human experience**
- Meta/Mega Purposes of Life cannot be owned, re-establishing a living connection always called for
- **Systems Intelligence is intelligence that taps on the Meta/Mega Purposes of Life implicit in any human system**

Systems Intelligenge Archetypes

- "Fixes that Fire"

- "Sharing Away the Burden"

- "Miracle of the Commons"

Systems Intelligence is Systems Thinking

- Already in use
- Applied in a split second
- Applied typically without awareness
- Applied without any conscious knowledge of the systems involved
- Inherent in us all as human beings

"Fixes that Fire" (1)

- Hitting the button
- Creating a triggering effect
- Coming up with a killer application
- Reaching the tipping point
- Creating resonance
- Pushing a snowball to roll

"Fixes that Fire" (2)

- The central theme of this archetype is that almost any decision carries long-term and short-term consequences, and sometimes the long-term consequences are tremendously more powerful than the short term impact suggests
- **Positive version of "Fixes that Backfire"**

"Fixes that Fire" (3)

- Martin Luther King's spontaneous "I have a dream" phrase.
- iPod for the image of Apple
- Linus Torvalds email, suggesting programming from an open source platform

"Sharing Away the Burden"

- People are enriched and empowered in various small and mundane, perhaps seemingly insignificant ways, and this will pay back in unexpected ways
- "Nobody knows what the solution is but someone will come up with one"
- **Positive version of "Shifting the Burden"**

"Miracle of the Commons"

- You resonate with a System that tells you can contribute
- Increased sense of empowerment as a result of being part of the excited and exciting, inspirired and inspiring, generous ja generosity-encouraging system
- You fly on the system
- Tolstoy's "Factor X"
- The common good of sharing this excitment and miracle makes you thrive
- **You love to reciprocate as you love your abundance in this field of generosity**

When Thematizing Systems Intelligence, Beware of (1)

- Subject-Object dualisms
- Taking forms of "Knowing that" as more primary than "Knowing how"
- Mistaking maps for territory
- Dismissing forms of intelligence that do not fit the propositional, objectifying & rationalistic thinking model

Systems Intelligence is Pre-theoretical and Involved

- Sensing a system vs. Seeing a system
- Knowing a system instinctually vs. Being able to model a system
- Feeling a system vs. Perceiving a system
- Being involved in a system vs. Identifying a system (or a Systems Archetype)
- Operating from within a system vs. operating on a system

When Thematizing Systems Intelligence, Beware of (2)

- The intellectual's temptation to take reflection-from-the-outside as more primary than action
- The intellectual's temptation to dismiss phenomena one doesn't have a handy word and an accepted concept for
- The intellectual's temptation to dismiss human experience in its phenomenological, phenomenal, "irrational" adundance
- The intellectual's temptation to dismiss as too vague the philosophy of life

A Systems Intelligent Agent Wants to

- Touch
- Enrich
- Bring flourishment

This is done by reaching out to the potentials of the given human system via the individual human systems of the subjects involved in the system

Particularly Relevant Systems are

- Belief systems
- Symbol systems
- Representational systems
- Narrative systems
- Emotional systems
- Interaction systems

Systems Intelligence is Systems Thinking

- taking place in the immediate present
- in a process that is unfolding
- in the "small worlds" of here and now
- situational
- need to act is immediate
- conducted on a platform of action where human stakes can be huge, objective stakes minimal

These Systems are "Chaotic"

- Change non-linear
- Butterfly effects possible
- Exponential growth possible
- Intellectual Firewalls do not Hold (Emotion/Reason, Self/Other, Art/Science, Big/Small, Masculine/Feminine, Profane/Sacred, Biological/Psychological..)

Emotional Parameters

- are critical for Systems Intelligence
- often disregarded by traditional systems analysis and intellectual tradition at large
- **create possibilities of tremendous leverage and resonance** for Systems Intelligence
- explain why for Systems Intelligence the details are often everything
- "What makes a difference in the hearts of people?"

Contextual Parameters

- are critical for Systems Intelligence
- often disregarded by traditional systems analysis and intellectual tradition at large
- **create possibilities of tremendous leverage** for Systems Intelligence
- explain why for Systems Intelligence the details often are everything
- "Would X work in this context?"

Details as a Route to

- Inspiration
- Insights
- Leverage
- Resonance
- Breakthroughs
- Snow Ball Effects
- Openings of Hearth
- Miracles
- Human Subjectivity

Look for the Details

- Not for the Whole, which typically cannot be grasped, or even imagined
- Not for the Loops, which you won't have time to analyse
- Not for the Links, which might be hiding, camouflaged, and the most significant of which might be totally unlikely still in the making
- Details are the key to Systems Potential and the Emergent Future that might be

Looking for the Trigger

- **David Lynch:** "Ideas are always triggered by something in the external world, but they trigger stuff that's deep inside you. You can look out the window and see an ant and the way it's walking will do something for you. It can trigger tons of stuff that's been inside you for years waiting to be ignited."

(Book of Changes. Interviews with Kristine McKenna, 2001)

Details, i.e. Systems Intelligence in *Presence*

- "…as [physicist Henri] Bortoft puts it, "**The part is a place for the presencing of the whole".** (p. 5)
- Peter's seminar in 1990 in **South Africa**, as de Klerk gives his aparheid-ending speech on television (p. 13-15). "Now he [a while businessman] stood and turned to look directly at Anne: "I want you to know that I was raised to think that you were an animal," he said. And then he began to cry."
- "Edgar Schein, one of the most respected scholars of organizational culture, says, **"If you want to understand an organization's culture, go to a meeting.""** (p. 48)
- **Joseph's story** of "Sacred Passages" (p. 55-67)
- **Otto's story of his grandfather at the ruins of his family's burnt farmhouse** (p. 79-81), and his grandfather's action when coming to the site. "Summoning all the energy he had left, my grandfather got of the car and walked straight to where my father was still working on the cleanup. He didn't even turn his head toward the soming ruins of the place where he'd spent most of his entire life. He simply went straight up to my father, took his hand, and said, 'Keep you head up, my boy. Look forward."

Why Details are a Headache to an Intellectual

- They are only details
- Paradigms emphasize the primacy of the generic
- Intellectual impressive models of details hard to mold
- "Fallacy of misplaced concretism"
- Details a source of excitement for Systems Intelligence

Why Details are Critical to Systems Intelligence

- Because they set people's emotional and mental systems in motion
- Because the Mind of the Five-Year Old (Gardner) is tuned to narratives
- Because "Being Moved" has a double meaning critical to Systems Intelligence
- Systems Intelligence wants to move systems by moving people first

Beer Game vs. Rose Buying

- **Key to Systems Thinking and to Systems Archetypes:** Beer Game
- In Beer Game, most people experience how the systems structure is overwhelming. As an individual, you cannot win.
- **Key to Systems Intelligence:** the case of single-rose-buying as a maneuver to take the prevailing Holding-Back-system by surprise
- In learning of the rose buying case in Esa's lectures, most people experience how the prevailing system of holding back is apparently overwheling, yet can be overcome with a simple maneuver that hits the right button. As an individual, you can win and can help others win.

Holding Back Systems

- Tend to take over, unless specific action is taken and retaken to counter them
- People are holding back (their enthusiasm, warmth, joy, belief in life, acceptance, encouragement, etc.)
  - in return
  - in advance
- Holding Back –systems fed by Human Bias to Negativity

Three Levels of Systems Intelligence

- **Level 1**: Your actions reflect the human systems of your life space and immediate vicinity
- **Level 2:** You have identified some of the systems of your life space, and use them intelligently
- **Level 3:** You have identified some of the systems of your life space, take notice of their life-decreasing aspects, move beyond those aspects to exploring the systems potentials, and act intelligently in the emerging space of systems potentials

Systems Intelligence

- Moving beyond Holding Back systems to life-enhancing and enriching systems
- Focus on Positive Deviance
- Domingo/Mehta –case as an example
- Single rose buying –case as an example
- 1.2. vs. 0.8 version of self as an example

Continuous Openness to Emergence

- **Systems Intelligence at level 3** amounts to opennness to emergence as a natural part of flourishment and life itself;
- **Systems Intelligence does not seek to explain, as the first priority is to contribute to what might emerge**. There is no more need to explain emergence than there is need for a performer to explain "the miracle of great performance";
- Releasing oneself from the need to explain, as opposed to making happen, Systems Intelligence leads attention to the direction of emergence rather than to cognitive barriers that might prevent it from happening.

Holding Back Emergence

- Emergence an anomaly from the point of view Holding Back
- Academic Criticism Culture a system of Holding Back
- A first-year student can list 15 reasons why the book Presence should not be taken seriously
- The examples of Presence as cases of sudden collapse of a local Holding Back system
- Media Lab as an example of a Non Holding Back system
- **From the point of view of future's healthy systems, emergence is as natural as in the growth of a child**

Emergence is Eagerly Waiting

- People are radically more sensitive to the metapurposes of life than they seem to be
- In their everyday systems, people give vastly misleading and lessed impression of their deeper aspirations regarding the metapurposes
- Fear is a key to the prevailing systems of Holding Back, but from within fear-driven systems, people's positive potentials are camouflaged

Presence Revisited

- **Emergence is natural**
- **Emergence is a sign of a healthy system**
- Our mental models encourage emotional, intellectual and social holding back, generating systems of holding back
- Life is diminished
- Celebrate life, celebrate nature, celebrate whales, life's grand and perhaps mysterious prosecces, join them

Example: Hope

- Hope counts for people
- Feeling of Hope moves people
- Hope is necessary for emergence
- Hope is triggered by small, symbolic changes
- Systems changes can be triggered by small, symbolic changes
- Systems Intelligence looks for such changes in the dimension of hope

The Main Worry for an Academic regarding Systems Intelligence

It works in practice

but

does it work in theory?

"I Have a Dream" Paradigm

- King's speech helped to set a more life-enhancing system in motion because it touched the right button in people's internal systems
- …and the time was ripe
- people starting to see a system they co-created and created them influencing even their microbehaviors

Esa's Agonies

- with the **Paphos seminar** where ordinary Finns of all walks of life **experience major life-enhancement** – and no theory explains why this could happen
- with life that seems tremendously diminished as compared to what it could be at any time, in light of the Paphos experience
- systems writings seem detached from life at the same time that systems are everywhere

Systems Intelligent Microbehaviours

- Microbehaviors as carriers and signals of possible systems potentials
- People are extremely sensitive to subtle microbehavioral messages
- Leverage found in seemingly neutral, unproductive, mundane and trivial everyday behaviours
- Gestures, facial expressions, twinkle in the eye, tone of voice, attention style etc. as systems constituting parameters
- Particularly relevant are such microbehavioral actions that touch upon meta/mega purposes of life

Heart's Commitment

- Needed for small actions, for which there is no guarantee of dividents
- Needed because big actions seem unrealistic
- The whole system seems to stand agaist you, including the microbehaviors of people who don't seem to care
- Emergent processes doomed irrational by the intellectual power system
- Systems madness everywhere, egoism, with the future of mankind looking gloomy
- … and still you believe in people

Knowledge is Not Power

- When knowledge is not available
  - still you have to act
- Bounded rationality –type "satisficing" (Simon) evaluation of the systems in the midst of which one operates
- Acting with intelligence in systems where those systems are too complex to be properly figured out

Systems Intelligence is Instinctual

- Part of our evolutionary survival toolbox
- Ability to figure out in broad outline what is going on
- Adaptability to the immediate ongoing processes
- Human beings are inherently systems intelligent before they have any structured "knowledge" at all
- Systems Intelligence of a Baby

For Paradigmatic Cases, Look for the Systems Intelligence

- of the Five-year old (Gardner)
- of the Fighter Pilot in the WW I
- of a Concert Pianist
- of a Conductor
- of a Film Director
- of a Mother with Small Children in a supermarket
- of an Elementary School Teacher
- of Desmond Tutu
- of Muhammad Ali

"The Ace Factor"

- "All the leading fighter aces [in WW I] had better than average distance vision, and also good depth vision. The difficult part was in teaching them what to look for. The average pilot saw nothing in his first few combats."
- **"Alertness was another facet allied to observation; the ability to react quickly and instinctively to a hazardous situation."**
- "Many pilots seemed to develop a sixt sense warning them of danger. This occurs again and again in the memoirs and diaries of the period".

Mark Spick: "The Ace Factor. Air Combat and the Role of Situational Awareness"

Systems Intelligence in Zaire

- "**Muhammad Ali**: I didn't really plan what happened that night. But when a fighter gets in the ring, **he has to adjust according to the conditions he faces."**
- "**George Foreman**: Muhammad's antennas were built to look for big punches. And with the style I had, my height, and my tendency to throw big punches – no matter how hard I hit, Muhammad had the instinct to get ready for each punch, ride it through, and be waiting for the next one.
- "I remember the punch that knocked me down, too. I was going after him. I was tired, but still didn't respect his punching power, so I was chasing him with my hands down. Muhammad was near the ropes. I missed with a right hand, turned around with my hands down, and he moved with speed that he wasn't supposed to have at that point in the fight after taking all those blows. He moved, threw a right hand. And boom!

(Thomas Hauser: Muhammad Ali. His Life and Times, 1991.)

Systems Intelligence is a Performer's Skill

"A performer is a truly split personality. One is reminded of Thomas Nagel's definition of the absurd: **'To be involved and detached at the same time**.' On the one hand you have the instructions, on the other, a free flow of associations. … I must control myself and free myself. … **A performer must be immersed in what he is doing, and at the same time stand outside**. He must lead and follow. (Pianist Alfred Brendl)

Systems Intelligence of Muhammad Ali

- "**Arthur Mercante**: I'd refereed two previous Ali fights, including his first bout against Frazier at Madison Square Gardern. And by the time he fought Norton at Yankee stadium, he wasn't the same fighter anymore. His timing was off; he tired more easily. But he was still the best boxer I've ever seen at coming up instinctively with what was necessary to win. … He was so smart; you could see his mind working, but **Ali had a sense of everything that was happening**, almost as though he was sitting at ringside analyzing the fight while he fought it."
- **Ken Norton** [who broke Ali's jaw in the first of their three fights]: "In 1986, I was in a bad car accident; real bad. … I don't remember much about my first few months in the hospital, but one thing I do remember is, after I was hurt, Ali was one of the first people to visit me. … But I remember looking up and there was this crazy man standing by my bed. It was Ali, and he was doing magic tricks for me. He made a handkerchief disappear; he levitated. … **Ali was there, and his being there helped me."**
    Thomas Hauser: Muhammad Ali. His Life and Times, 1991.

Making a Difference

- on a small scale (your favorite high school teacher)
- perhaps on a big scale (Erin Brockowich)
- perhaps on an enormous scale (Jesus, Gandhi, Environmental Movement)

  by hitting a chord, by setting a system in motion, by creating a resonance in human hearts and wills

In Order to Save the World

- We need Systems Thinking to crystallize the macrolevel madness and the Big Picture
- We need U-curve learning and emergent processes that support life
- In bringing such processes to life, concrete, contextual, local, life-enhancing systems enrichments are necessary, calling for Systems Intellegence of Level 3.