

Dynamics of Intractable Conflict

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**Why are some intergroup
conflicts impossible to solve
and what can we do to
address them?**

“...one of the things that frustrates me about this conflict, thinking about this conflict, is that people don’t realize the complexity... how many stakeholders there are in there...I think there is a whole element to this particular conflict to where you start the story, to where you begin the narrative, and clearly it’s whose perspective you tell it from...One of the things that’s always struck me is that there are very compelling narratives to this conflict and all are true, in as much as anything is true... I think the complexity is on so many levels...It’s a complexity of geographic realities...the complexities are in the relationships...it has many different ethnic pockets... and I think it’s fighting against a place, where particularly in the United States, in American culture, we want to simplify, we want easy answers...We want to synthesize it down to something that people can wrap themselves around and take a side on...And maybe sometimes I feel overwhelmed...”

(Anonymous Palestinian, 2002)

Four Basic Themes

- An increasing degree of complexity and interdependence of elements.
- An underlying proclivity for change, development, and evolution within people and social-physical systems.
- Extraordinary cognitive, emotional, and behavioral demands...anxiety, hopelessness.
- Oversimplification of problems.

Intractable Conflicts: The 5% Problem

- Three inter-related dimensions (Kriesberg, 2005):
 - Enduring
 - Destructive
 - Resistant
- Uncommon but significant (**5%**; Diehl & Goertz, 2000)
 - 5% of 11,000 interstate rivalries between 1816-1992.
- Occur in families, organizations, communities, regions, etc.
 - Mostly studied in geopolitical domain: Israel/Palestine, Afghanistan, Somalia, Sudan, Angola, The DRC, Cyprus, Kashmir, Sri Lanka, Uganda, Mozambique, Colombia, etc.

Shared Qualities...

- *The power of history* is considerable.
- Tend to become increasingly **difficult** and **complicated** over time but are seen as incredibly **simple** by the people in them.
- The people involved tend to share *an illusion of free will*.
- The pain and demands of the here-and-now focus people on responding to the current crisis, which fosters **short-term, problem-oriented thinking**.
- They **don't respond well** to the many strategies and tactics for constructive conflict management.
- They **last too long** and are **very expensive**.



**What is the essence of
Intractability?**

Intractability – 56 Essences

(Coleman, 2003)

■ **Context:**

- Legacies of dominance and injustice
- Insulated elite
- Instability or anarchy

■ **Issues:**

- Human and social polarities
- Deep symbolism and ideology
- Hidden agendas-investments

■ **Relationships:**

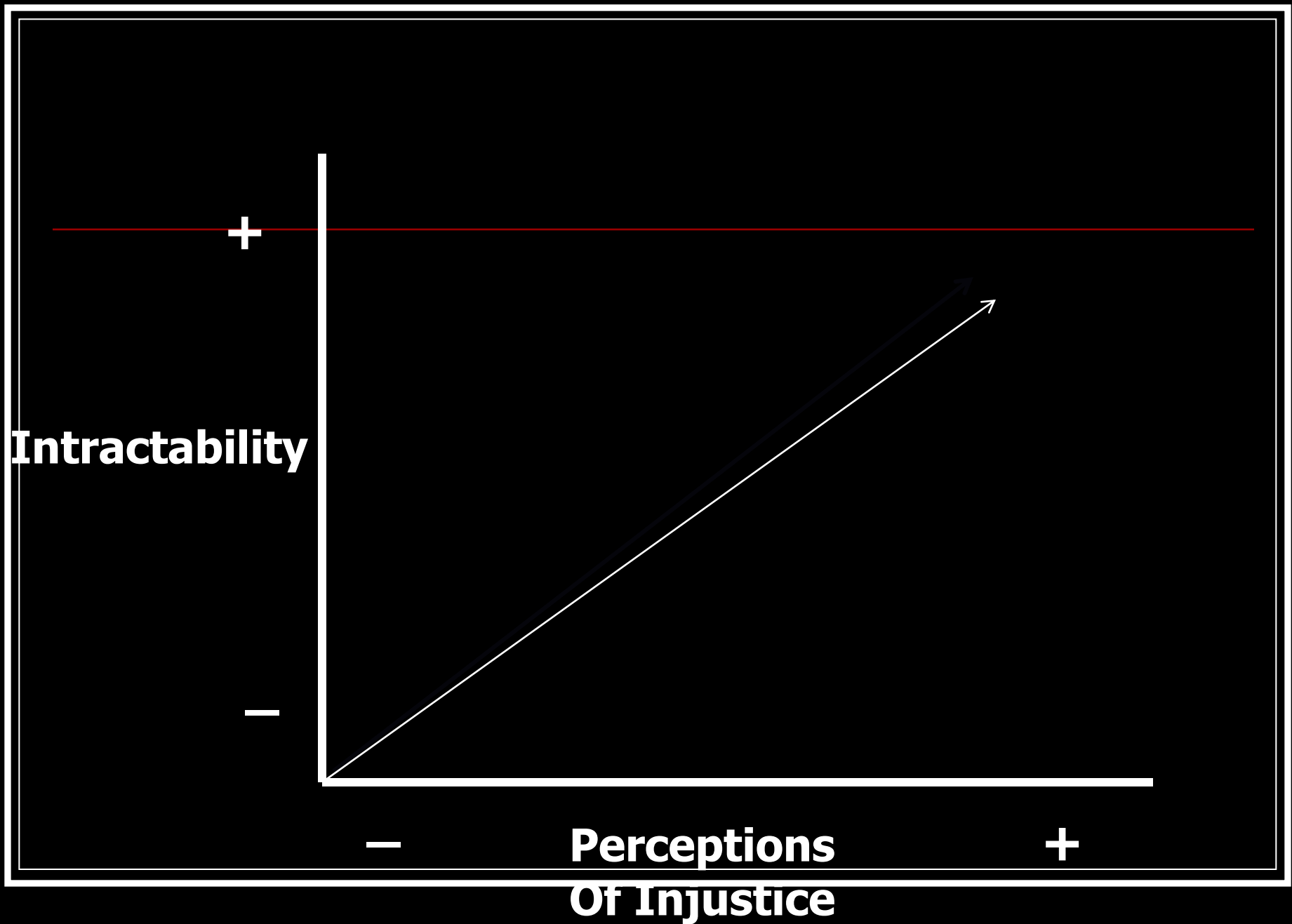
- Exclusive & inescapable
- Zero-sum group identities
- Intense internal dynamics
- Fractured ingroups
- Equal power

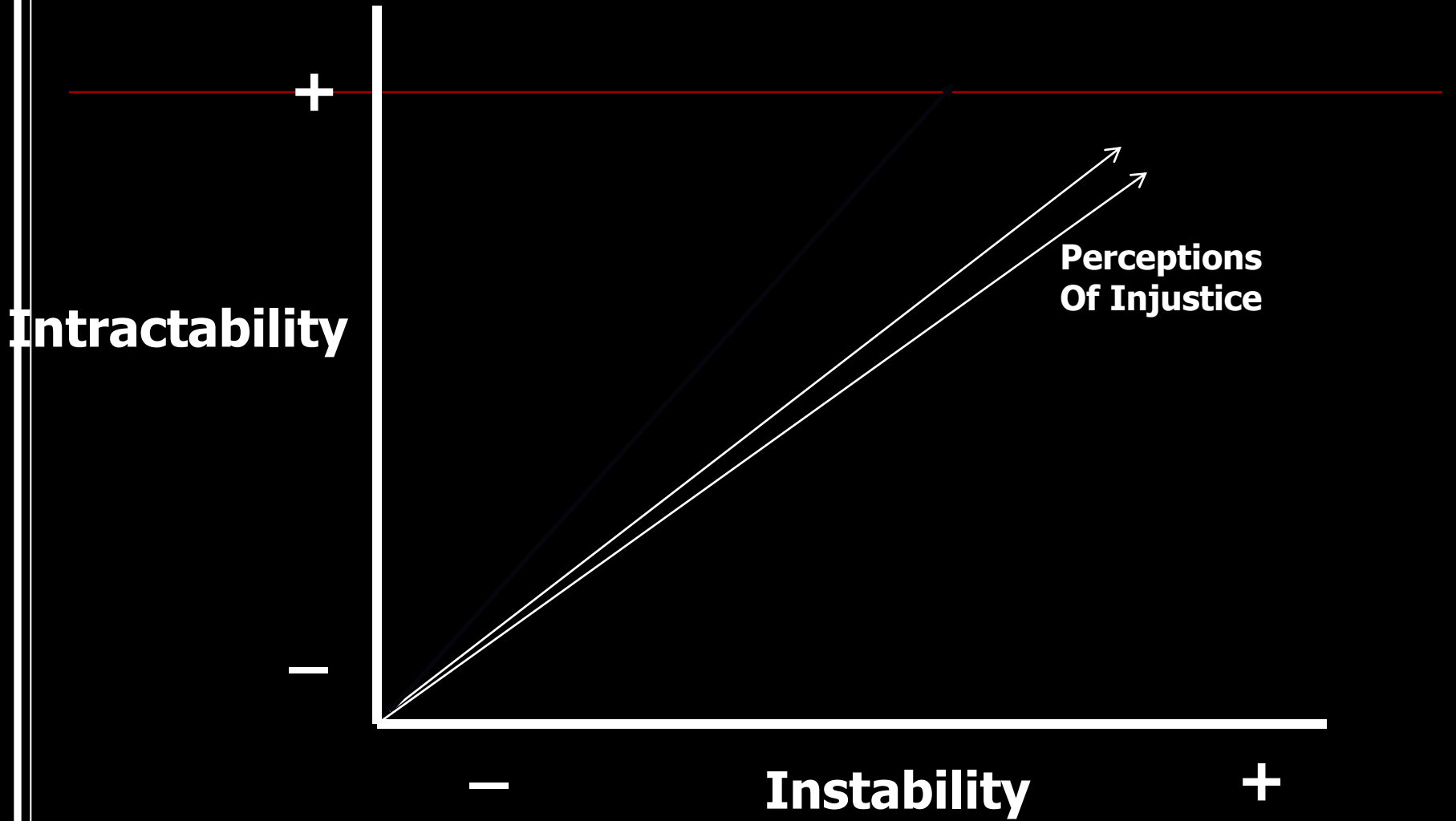
■ **Processes:**

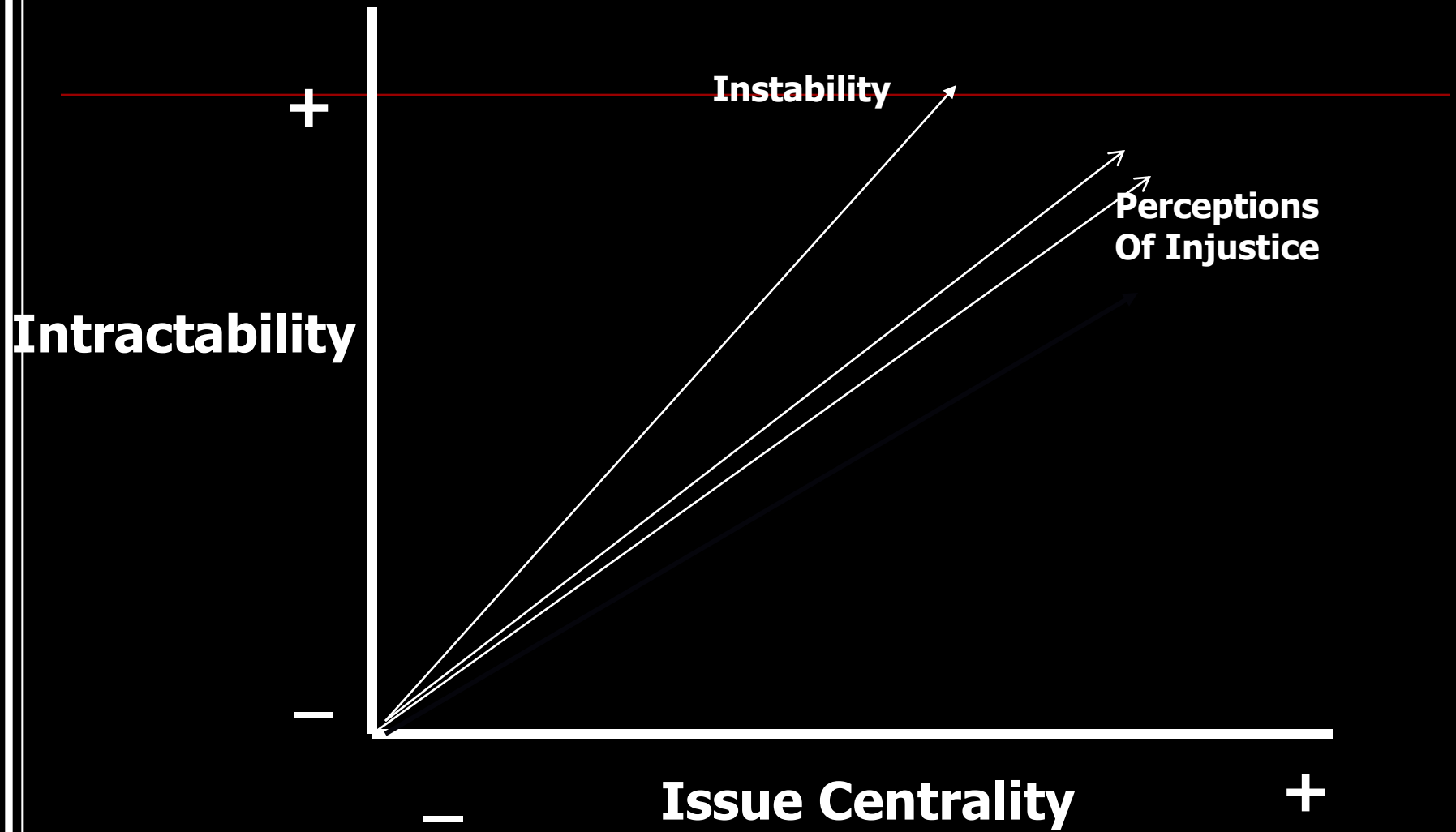
- Strong emotionality
- Malignant psycho-social dynamics
- Pervasive spread – bad neighborhoods
- Blocked 3rd parties

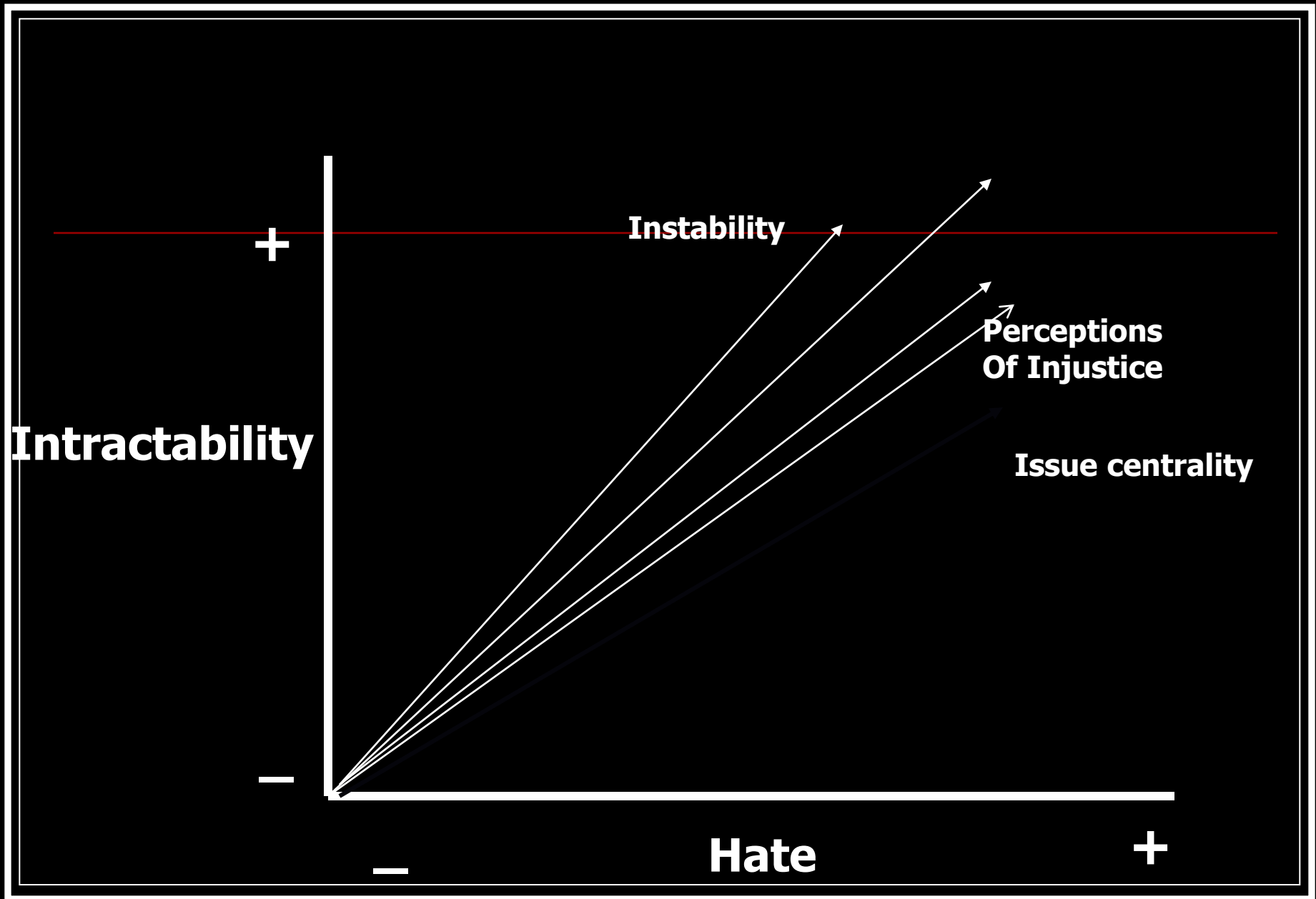
■ **Outcomes:**

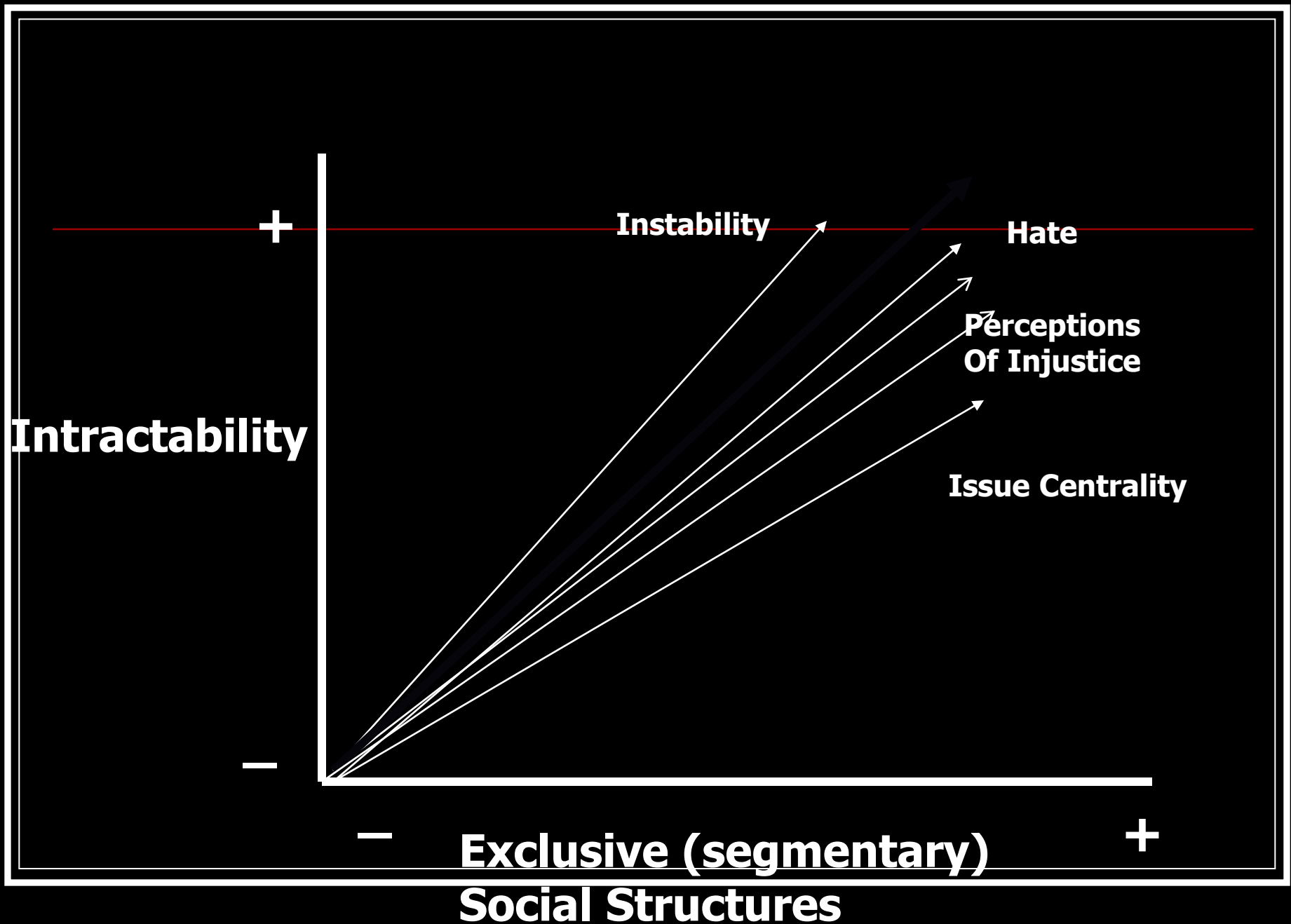
- Protracted trauma
- Normalization of hostility and violence
- Complexity

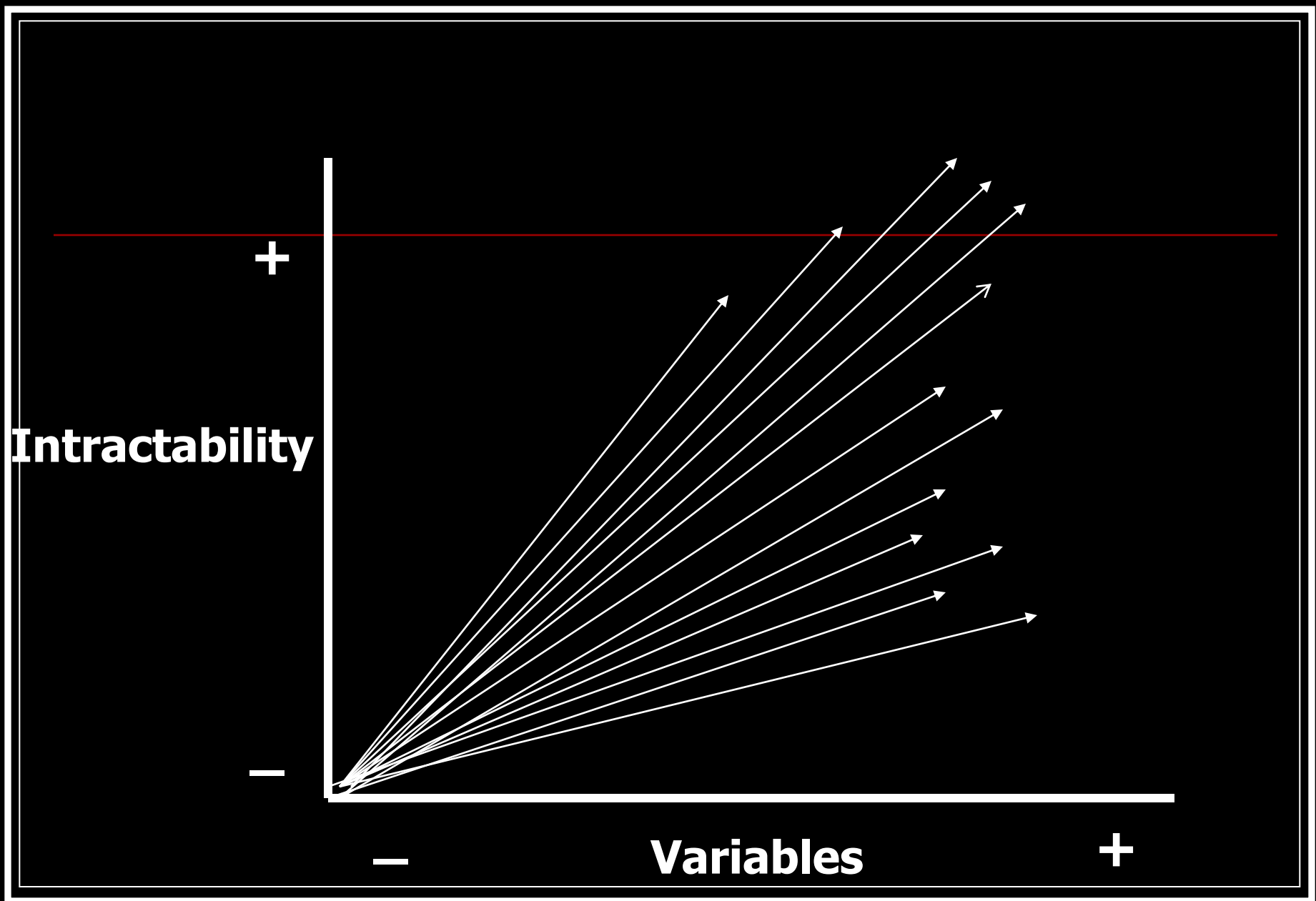












**Intractable
Patterns
Of Conflict**

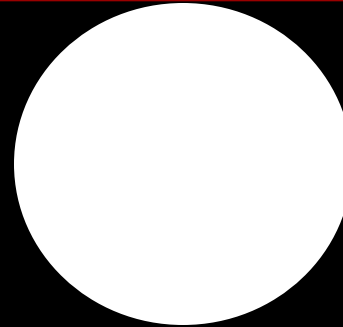
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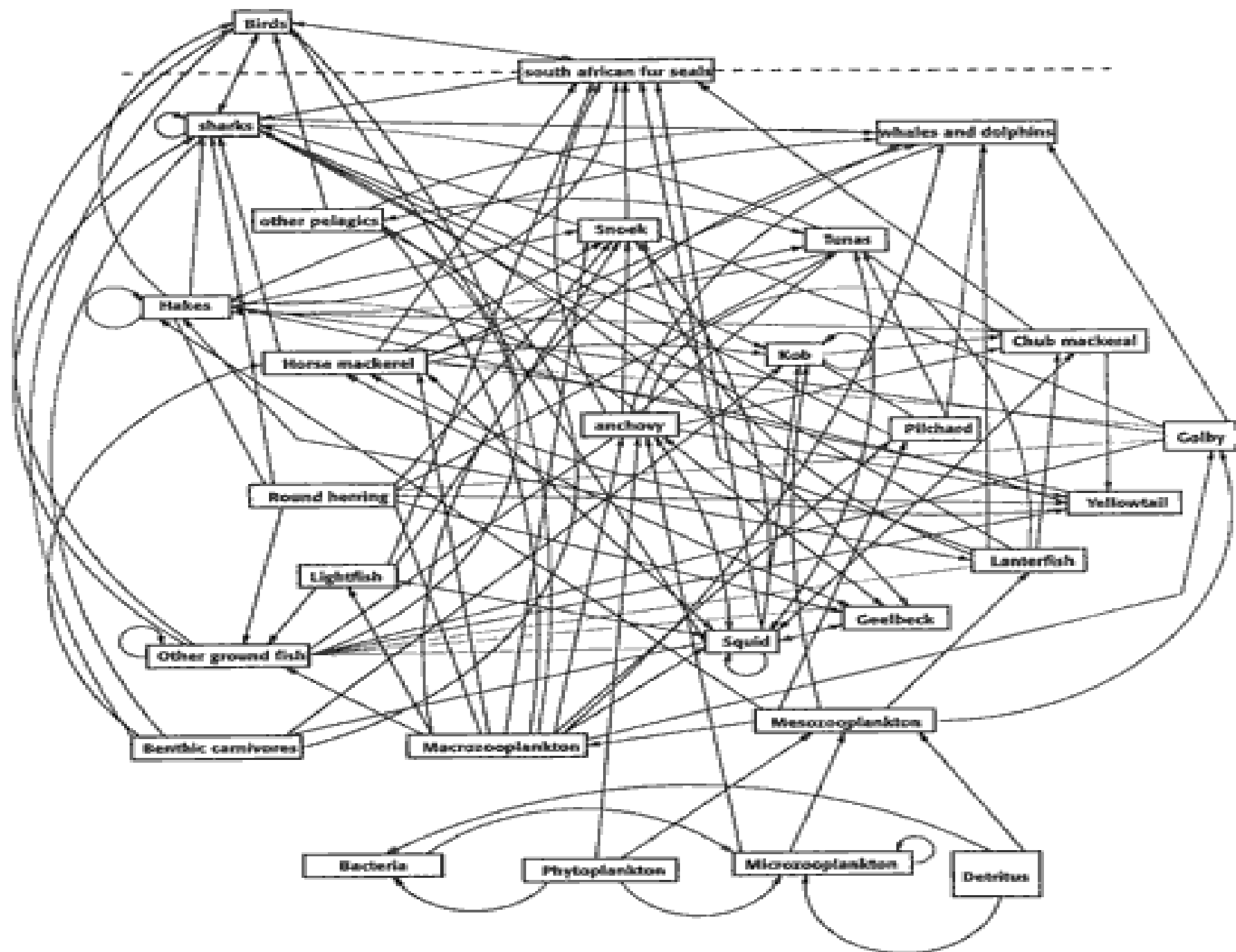
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Variable Cluster

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Intractability – Why?

(Coleman, 2003)

■ Context:

- Legacies of dominance and injustice
- Insulated elite
- Instability or anarchy

■ Issues:

- Human and social polarities
- Deep symbolism and ideology
- Hidden agendas-investments

■ Relationships:

- Exclusive & inescapable
- Zero-sum group identities
- Intense internal dynamics
- Fractured ingroups
- Equal power

■ Processes:

- Strong emotionality
- Malignant psycho-social dynamics
- Pervasive spread – bad neighborhoods
- Blocked 3rd parties

■ Outcomes:

- Protracted trauma
- Normalization of hostility and violence
- Complexity

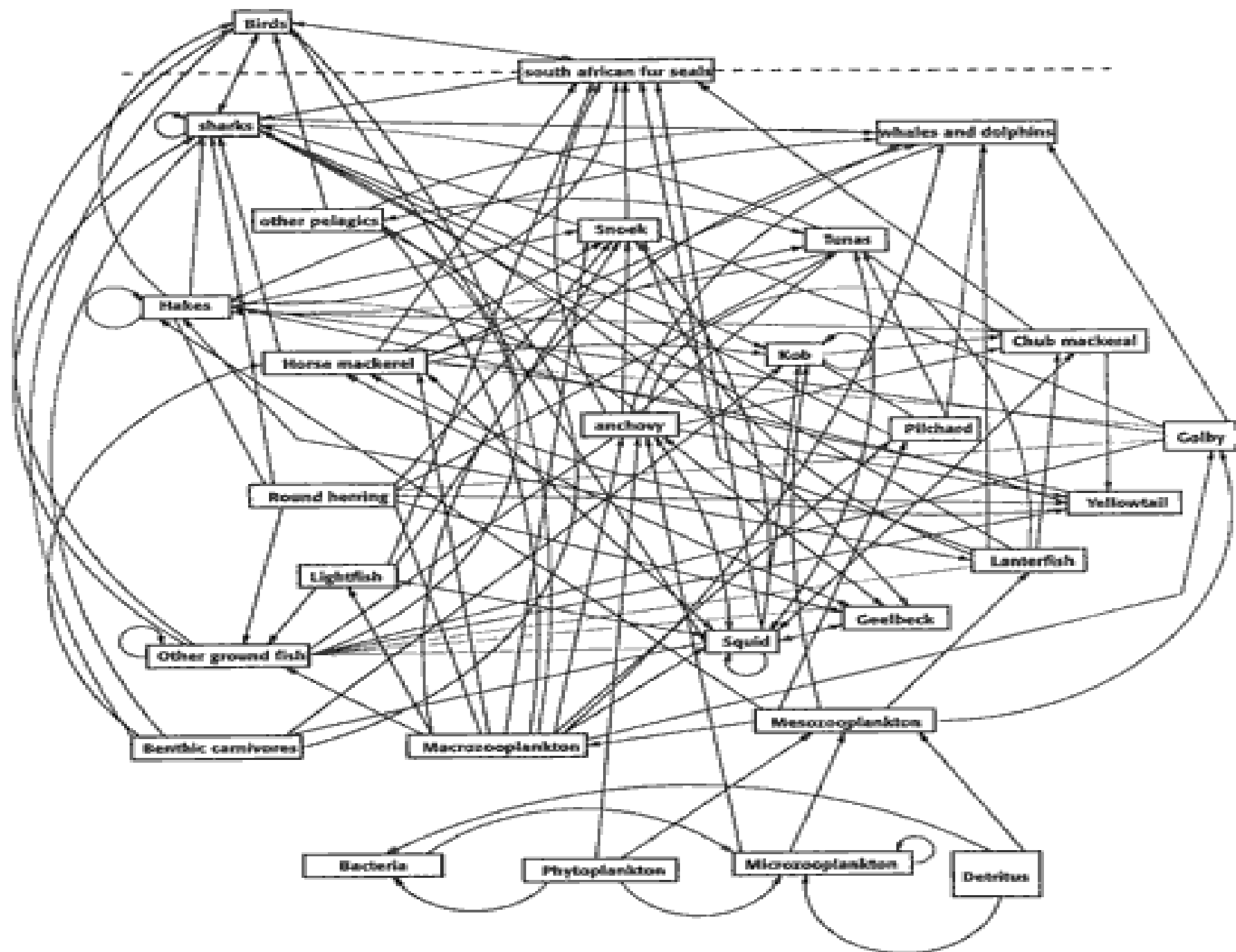
■ Multiple-linked sources & levels

■ Complex interactions

■ Mercurial - evolving

■ Idiosyncratic

1: They are different.



The Frame Problem

(Peterson & Flanders, 2002)

**Given a complex problem,
what is or is not germane to addressing it?**

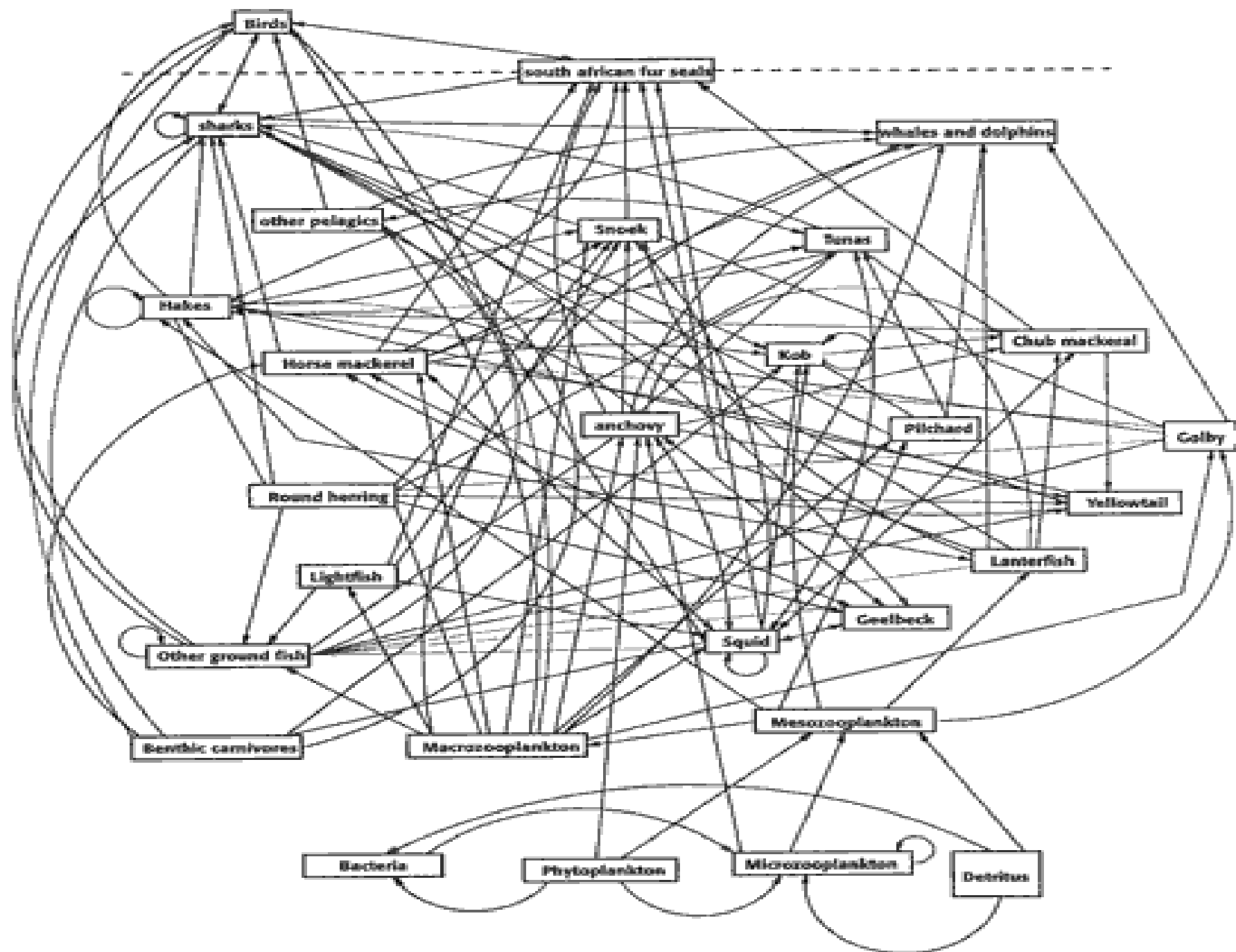
- **4 Normal Challenges:**

- *The Object Problem*: parts, context, related objects & observer.
- *The Subjectivity Problem*: infinite frames.
- *Cognitive Processing Problems*: constraints.
- The Problem of *Dynamism*: what changes?

- **Under High-Tension, Threat, and Polarization:**

- Anxiety, stress & impaired decision-making (Osgood).
- Preventative orientation (Higgins).
- Contradictory & politically consequential information.

2: They are very hard to comprehend.



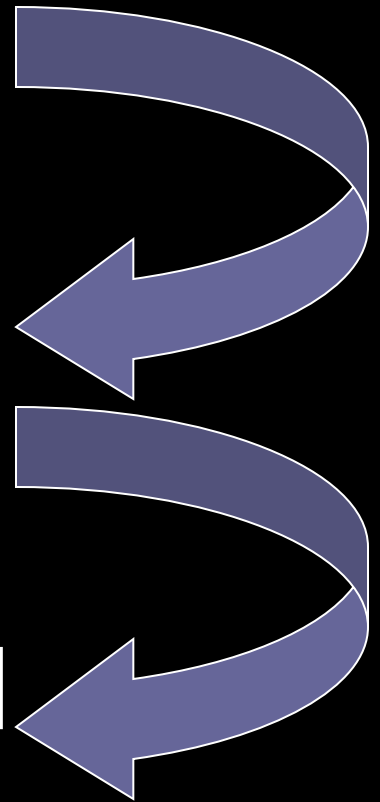
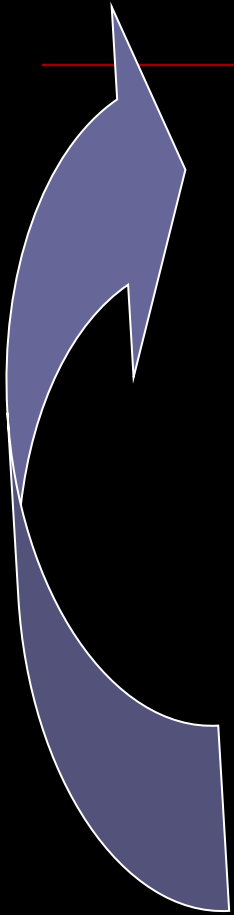
Top 11 Reasons why Current Approaches To Conflict Resolution Don't Work On The 5% Problem

1. They compare fluid things to fixed things.
2. They think in straight lines.
3. They privilege the short-term.
4. They frame conflicts in narrow ways.
5. They mostly focus on deficits.
6. They too often marginalize emotions.
7. They are overly simple (traditional theory).
8. They are overly complex (general systems theory).
9. They miss the invisible (potential).
10. They are rarely evidence-based practices.
11. They remain unaware of the unintended consequences of well-intentioned acts.

3: Our models and methods are lacking.

Intractability – Why?

- They are different
- They are misunderstood
- They are mishandled



A Dynamical-Systems Approach to **Conflict and Intractability***

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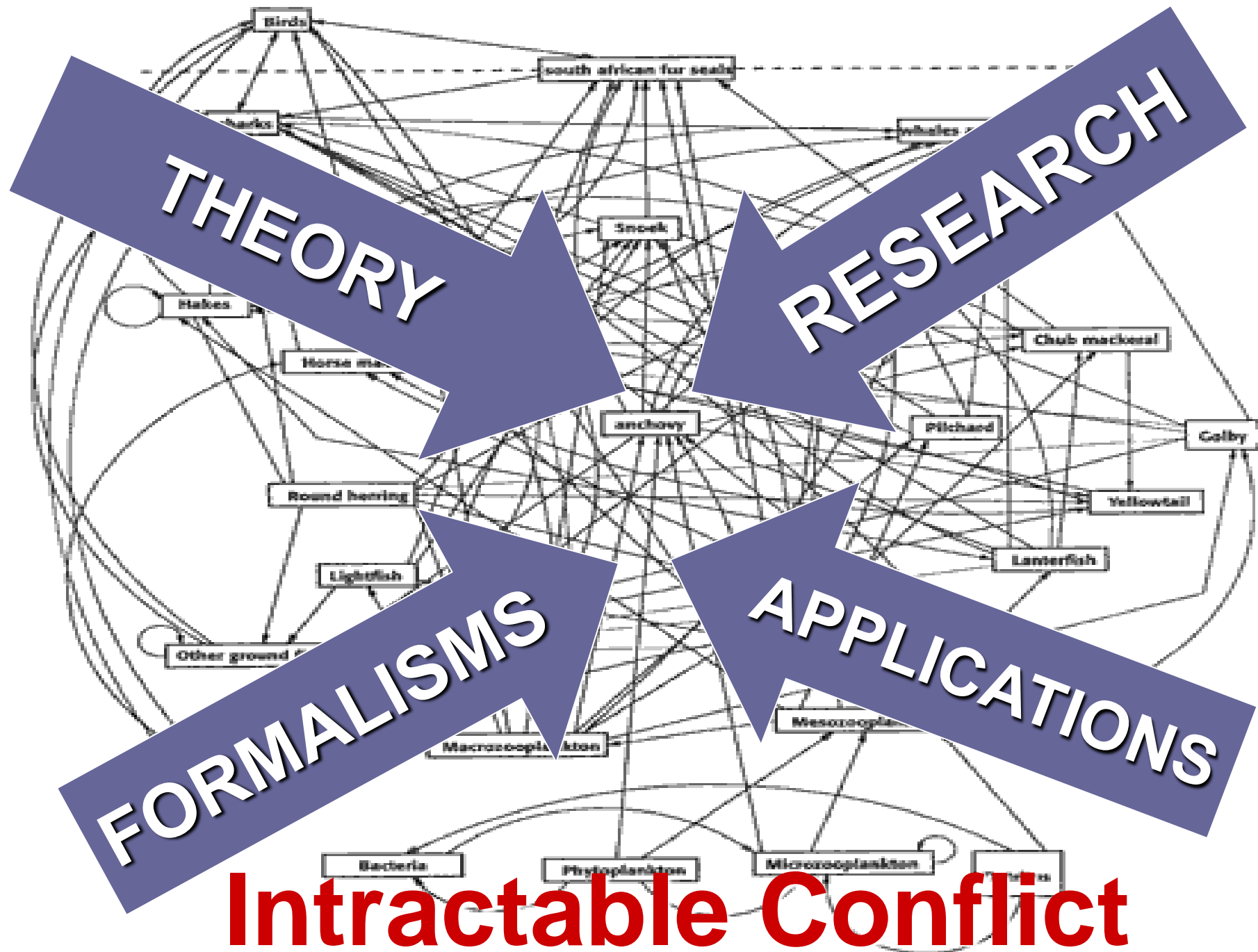
(extraordinarily gifted students)

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Conflict & Peace Dynamics!





Complexity Science & Dynamical Systems

- Applied mathematics
- A *dynamical system* is a set of interconnected elements that change and evolve in time.
 - Non-linear relations: system evolves as each element adjusts to the joint influences of others.
- **Dynamical minimalism** (Nowak, 2004)

Dynamical Minimalism

“The discovery that complex properties may emerge from simple rules is one of the most important discoveries of modern science... If simple rules can produce complex phenomena, then complex processes and structures can be explained by simple models...only if these rules interact with each other or with the environment.”



- **Andrzej Nowak (2004)**

“For every complex problem
there is a simple solution
that is wrong.”

- G. B. Shaw





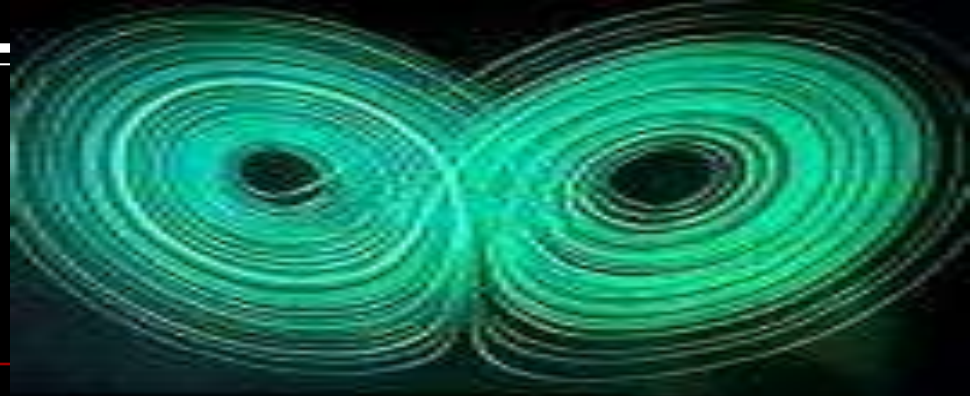
“Simple answers which lie on this side of life’s complexities are cheap. However, simple truths which exist beyond this complexity, and are illuminated by it, are worthy of a lifetime’s commitment.”

- Vaclav Havel

Complexity Science & Dynamical Systems

- Applied mathematics
- A *dynamical system* is a set of interconnected elements that change and evolve in time.
 - Non-linear relations: system evolves as each element adjusts to the joint influences of others.
- **Dynamical minimalism** (Nowak, 2004)
- Offers new metaphors, methodologies and mathematical models for conflict:
 - Beyond games and bi-lateral relations: networks, self-organization, chaos, emergence, **attractors**, etc.

Attractors



- Seen in patterns of data.
- A state or pattern of changes toward which a system evolves overtime and to which it returns if perturbed.
 - Similar to the notion of equilibrium.
 - Patterns of thought, feeling, action developing through interactions of many variables.
 - They “attract”.
 - Energy minimization
- **Intractable conflicts** = strong, **self-organizing attractors** for destructive conflict

[illegible]

- Intractable conflicts are made up of many different parts that all collapse together and then begin to take on a life of their own – so they SEEM impossible to solve.
- When conflicts collapse and act like this a paradox occurs – they tend to spread and become more and more complicated in the real world – but are perceived to be simpler and simpler by those IN THEM.
- In other words, people's subjective experience overwhelms objective events & information.

DST Summary

- When these complicated conflicts are seen as so simple, two things happen:
 1. **Negative information** about the enemy is salient, sought out and processed and fuels the escalation and spread of the conflict (reinforcing feedback = strong attractor), **and**
 2. **Positive information** about the enemy is ignored/denied (inhibiting feedback) – but slowly accumulates out of people's awareness and establishes a foundation for peaceful relations.

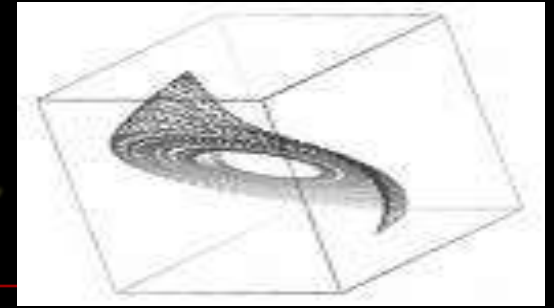
DST Summary

- **The tipping-point into intractability** occurs when the destructive attractor *self-organizes*, and becomes unresponsive to changes in the environment.
- Now, we have a very strong, coherent, self-perpetuating attractor for destructive conflict – where people and events are oversimplified, polarized, over-identified and very biased – and a relatively weak, latent attractor for constructive relations.

DST Summary

- Then, very big things – interventions – seem to make no difference in the conflict...but very small things, even random events, can trigger peace..
- However, fostering peace that lasts needs to involve:
 1. Understanding these basic dynamics,
 2. Increasing probabilities (attractors) for peace, and
 3. Decreasing probabilities (attractors) for war.
- There are many artful ways to do this.

Research Agenda



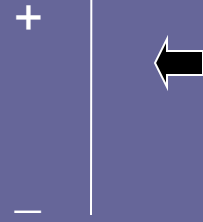
- How do different conflict attractors develop?
- How do they express and maintain conflict?
- How might strong destructive attractors be disassembled?
- Case studies, interview and survey research, experimentation, computer simulation modeling.

Research Projects



- Qualitative Research:
 - Mozambique case study
 - Ashoka Fellows case studies
 - Grounded theory with disputants and experts
- Attractor Laboratory research:
 - **Difficult conversations lab**
 - Pervasiveness studies
 - Escalation dynamics studies (hysteresis)
 - Action Identification (attractor deconstruction) studies
- Mathematical Models - Computer Simulations:
 - Complex networks of conflict (collapse of complexity)
 - Spread of conflict (pervasiveness)
 - Tractable – intractable modes of conflict
 - Attractor landscapes in conflict

Moral Conflict Lab



- Participants engage in a real discussion of a moral conflict and attempt consensus – recorded.
- Participants asked to review the tapes of their negotiation.
- And to operate a computer mouse to indicate from moment-to-moment the positive and negative feelings, thoughts, etc. that arose for them during the negotiation (Vallacher and Nowak, 1994).
- Examine *patterns* of responses over time - ***attractors***.

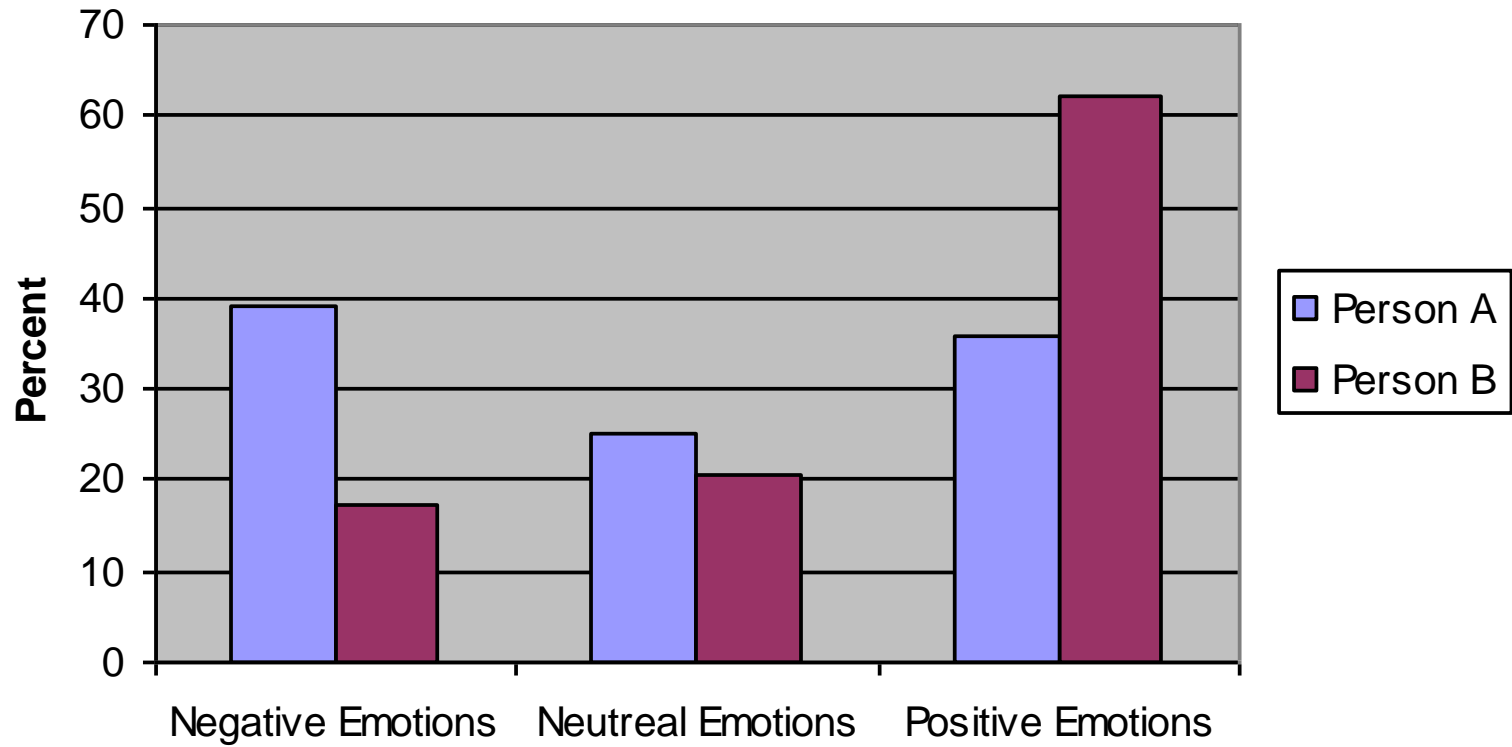
DYAD 1

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7

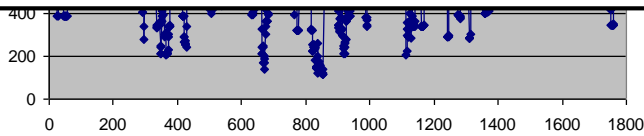
Positive

1000



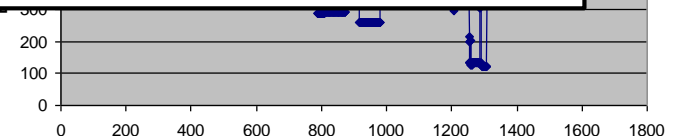
Positive Emotions

Negative Emotions



Time

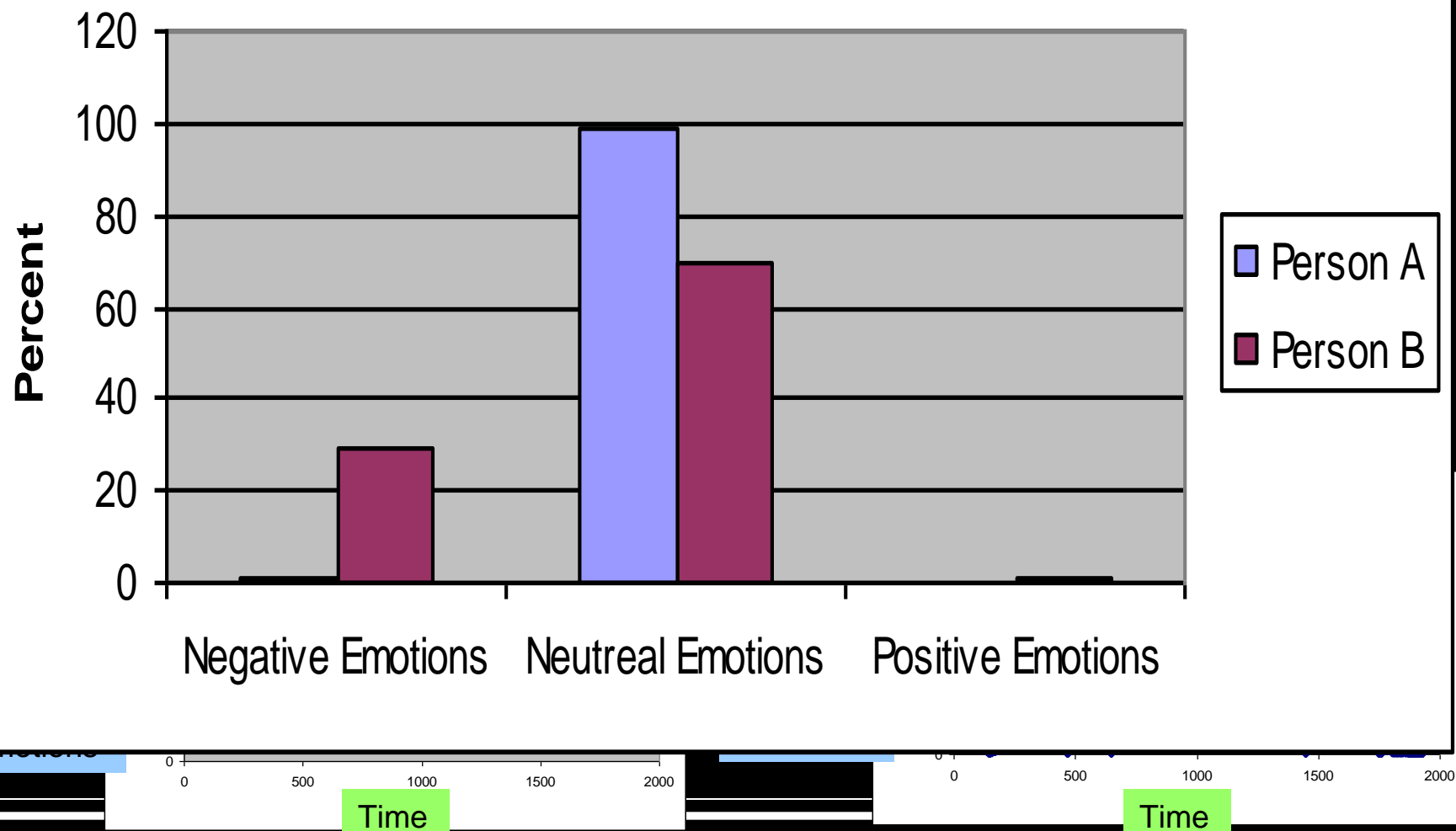
a Negative Emotions

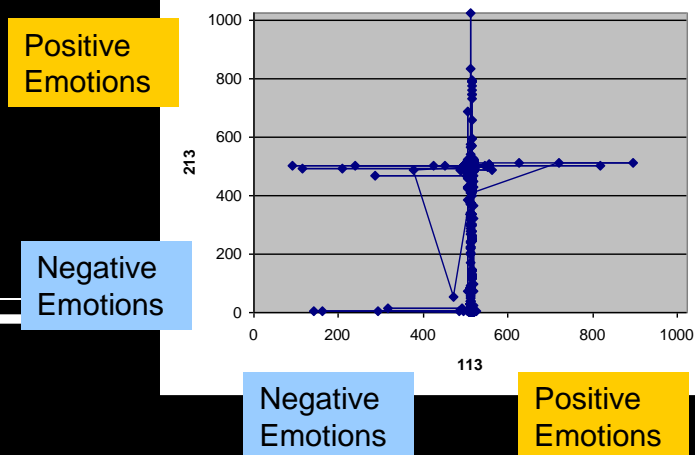
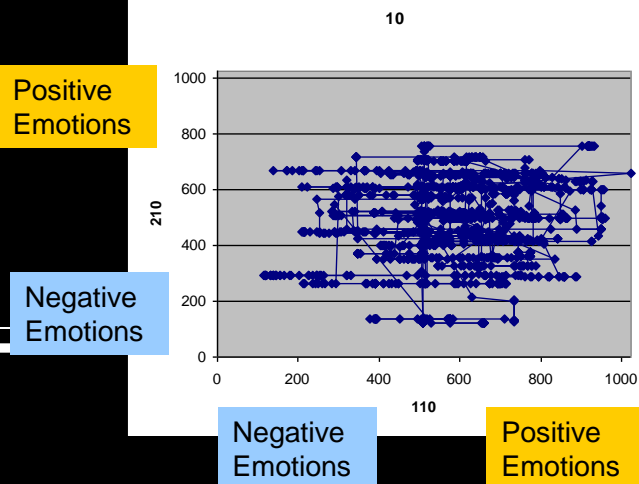
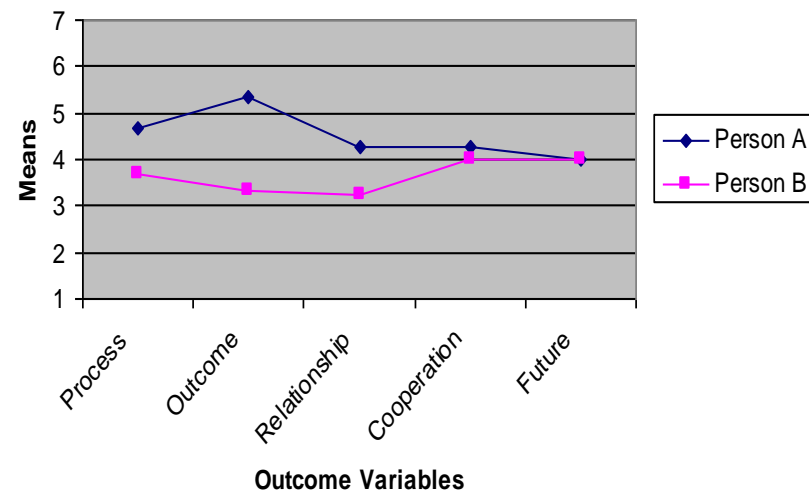
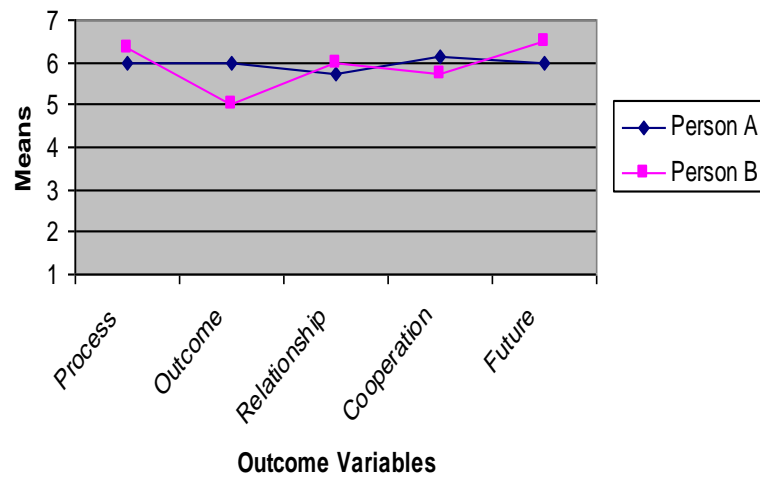
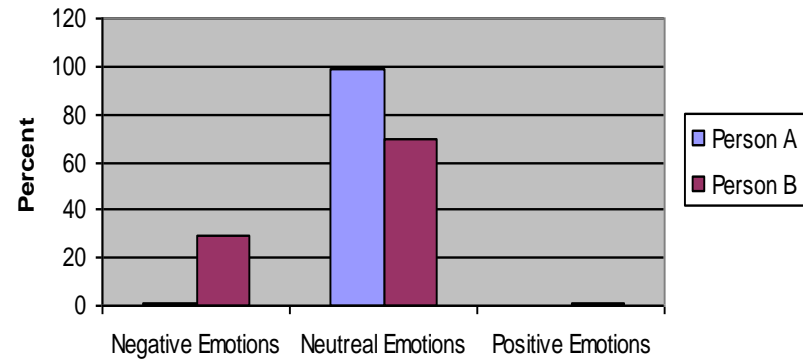
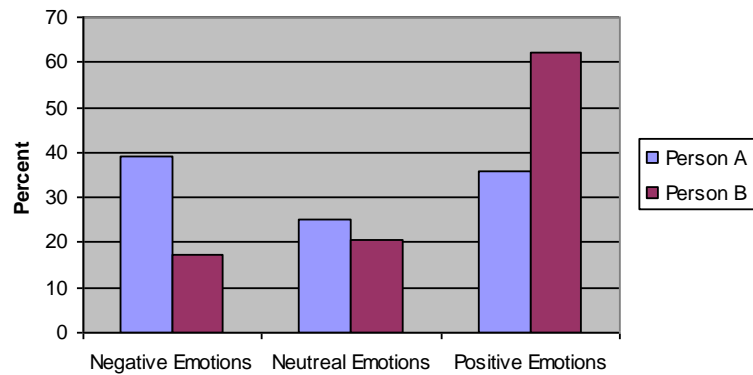


Time

DYAD 2

Person A & B





Summary of DCL Findings

Study 1: Results (**Correlational Study**)

■ High complexity attractors matter:

- Emotional:
 - Higher **positive to negative emotional ratio** = better quality statements, higher satisfaction
 - Higher **synchronicity** = better quality statements, higher satisfaction
 - **Initial conditions** key (first 3 minutes)
- Cognitive:
 - Higher **integrative complexity** = better quality statements, higher satisfaction, more learning
- Behavioral:
 - More **balance between pro-self/prosocial** behaviors for constructive.
 - More **balance between inquiry and advocacy** in constructive dyads.

Summary of DCL Findings

Study 2: Results (**Experimental Study**)

■ High complexity matters:

■ Outcomes:

- High complexity condition **reached consensus more** and had **better quality statements**
- High complexity condition **more cooperative** and **more satisfied with the relationship**.

■ Emotional:

- High complexity condition had **more positive emotions** and **less negative emotions**
- High complexity condition had higher **positive to negative emotional ratio**.

■ Cognitive:

- High complexity condition discussed the topic with higher degrees of **integrative complexity**.
- High complexity condition **increased their level of integrative complexity** significantly more from pre to post test.

■ Behavioral:

- High-complexity condition evidenced **more integrating and obliging behaviors**

**Increasing probabilities for
peace to emerge**

Getting **Un-Attracted** to Conflict

1. A *good enough* conceptual framework
2. A set of evidence-based principles and practices
3. Skills: Intuition, complexity, creativity, adaptability, perseverance & humility

Recent DST Publications

- Vallacher, R., Coleman, P. T., Nowak, A., Bui-Wrzosinska, L. (2010). Rethinking intractable conflict: The perspective of dynamical systems. **American Psychologist**.
- Nowak, A., Bui-Wrzosinska, L., Coleman, P. T., Vallacher, R., Borkovsky, W., and Jochemczyk, L. (2010). Seeking sustainable solutions: Using an attractor simulation platform for teaching multi-stakeholder negotiation. **Negotiation Journal**.
- Coleman, P. T. & Vallacher, R. (2010) Dynamical systems theory and conflict. **Peace and Conflict: The Journal of Peace Psychology**.
 - Vallacher, R., Coleman, P. Nowak, A., Bui-Wrzosinska, L. (2010). Dynamical foundations of intractable conflict: Introduction to the special issue.
 - Praszkie, R., Nowak, A., and Coleman, P. T. (2010). Social entrepreneurs and constructive change: The wisdom of circumventing conflict.
 - Musallam, N., Coleman, P.T., and Nowak, A. (2010). Understanding the spread of malignant conflict: A dynamical-systems perspective.
 - Liebovitch, Vallacher, & Michaels (2010). Dynamics of cooperation-competition interaction models.
 - Bartoli, A., Bui-Wrzosinska, L., & Nowak, A. (2010). Peace is in movement: A dynamical systems perspective on the emergence of peace in Mozambique.
- Coleman, P. T., Vallacher, R., Nowak, A., Bui-Wrzosinska, L., & Bartoli, A. (forthcoming). Navigating the landscape of conflict: Applications of dynamical systems theory to protracted social conflict. In Ropers, N. (Ed.), **Systemic Thinking and Conflict Transformation**. Berlin, Germany: Berghof Foundation for Peace Support.

Go to: <http://www.iccc.edu.pl/as/>

Getting **Un-Attracted** to Conflict

Six Evidence-Based Practices

EBP#1: **Complicate things:** Escaping Attractors

EBP#2: **Simplify things:** Focusing on Agents & Hubs

EBP#3: **Build Up:** Growing Hidden Possibilities

EBP#4: **Tear Down:** Dismantling Destructive Traps

EBP#5: **Change the Landscape:** Working the Levers

EBP#6: **Make More Decisions:** Adapting to Change

The **Attractor Software Tool**



- Offers simple visualization of how elements link to affect patterns of constructive/destructive behaviors.
- It helps to untangle the web: simplifies understanding of a system w/o oversimplifying the problem.
- It suggests a sequence of activities that can lead to **a reconfiguration of the system**.
- It shows that the same action can have multiple consequences and distinguishes short- and long-term (+ & -) consequences.
- And points to **sustainable solutions**.

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Attractors are Everywhere!

Model Comparison

Standard Conflict Resolution Models

- Compare fluid things to fixed
- Think in straight lines
- Privilege the short-term
- Frame conflicts in narrow ways
- Mostly focus on deficits
- Often marginalize emotions
- Are overly simple
- Are overly complex
- Miss the invisible (potential)
- Rarely employs evidence-based practices
- Unaware of the unintended consequences

The Attractor Landscape Model

- Focuses on ongoing dynamics
- Emphasizes non-linearity and feedback loops.
- Identifies long-term temporal patterns.
- Works with multiple perspectives.
- Works with both positive and negative attractors
- Emotional dynamics are central
- Frames conflicts in both complex and simple ways
- Works with latent potential
- Employs evidence-based practices
- Anticipates unintended consequences

Basic Skills

- Understanding systemic, non-linear stability and change;
- Mastering complex problem-solving
- Adaptivity & Integrity
- Thinking globally and locally – and understanding what's in-between
- Managing the tensions between short-term & long-term thinking
- Learning to see both the opportunities and dangers ahead:

The Big Idea!

(Wertheimer, Kohler, Koffka, & Lewin)

- The relationship between complexity, contradiction, coherence, and conflict.
 - Conflict occurs in a field of forces.
 - Drive toward simplification and order.
- Either extreme – overwhelming complexity or oversimplified coherence – is problematic.
- In intractable conflicts, the tide pulls fiercely toward coherence and simplification.
- **Pervasive idea in science:**
 - Physical Health
 - Integrative complexity
 - Political thinking
 - Need for closure
 - Emotional complexity
 - Behavioral complexity & flexibility
 - Social identity complexity
 - Multiple-categorization in outgroup perception
 - Person-situation fit
 - Relational balance
 - Creativity, learning and innovation in groups
 - Cultural rule complexity
 - Dialectic reasoning and culture
 - Cultural tightness-looseness
 - Structural and institutional complexity

The Crude Law of Coherence and Conflict

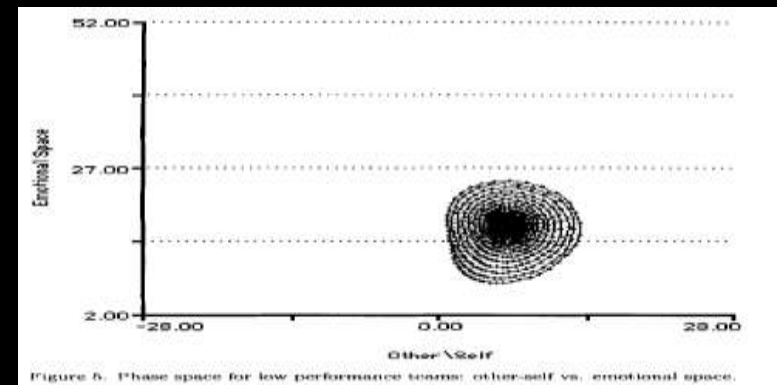
- Humans are driven toward consistency and coherence in their thinking, perception, feeling, behavior, and social relationships.
- Conflict intensifies this drive, which is functional to a point, but can become dysfunctional and pathological with prolonged conflicts.
- However, more complex patterns of thinking, feeling, acting, and social-cultural organizing can mitigate this, and result in more constructive responses to conflict.

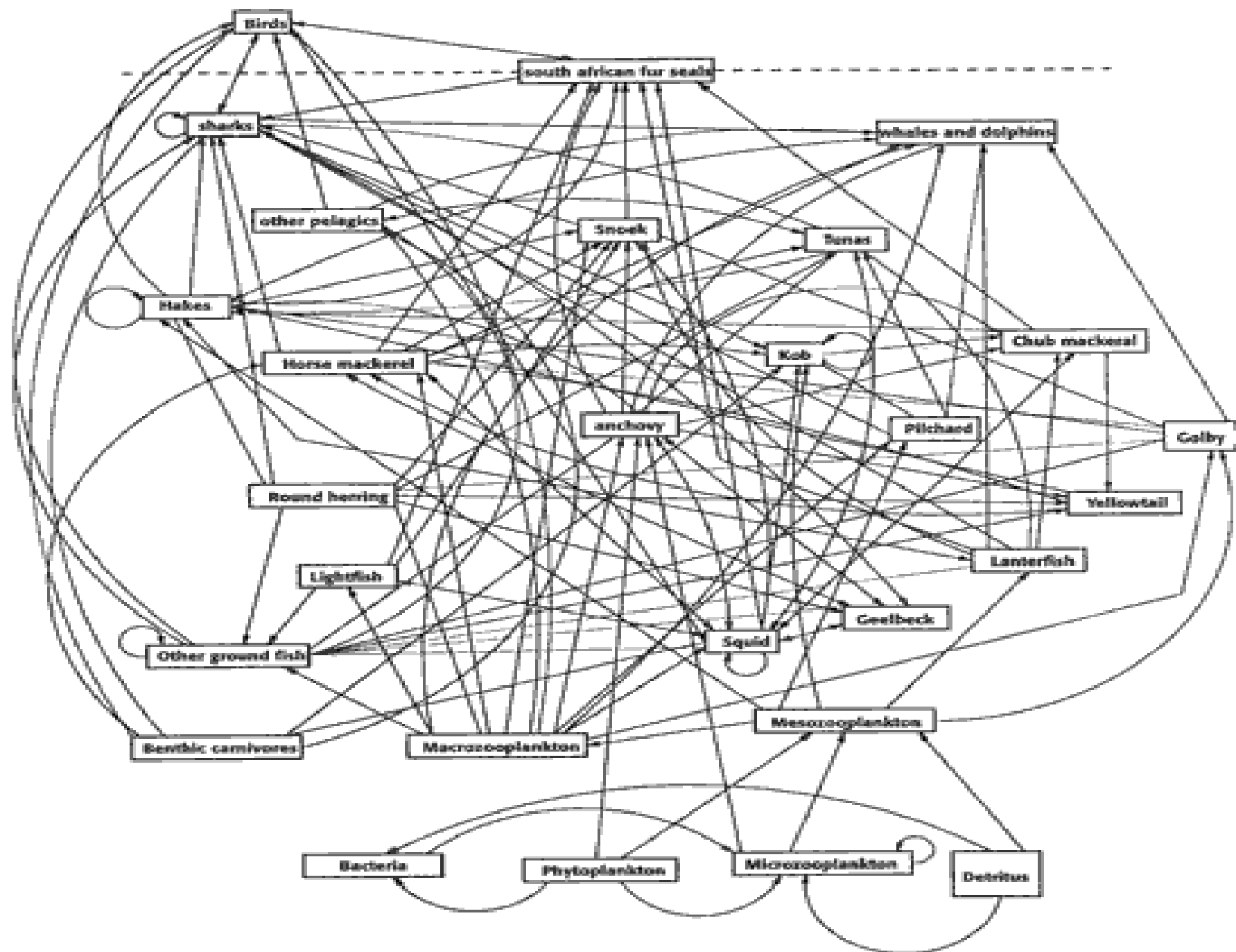
The Crude Law of Duration and Conflict

- The longer they last the longer they last.
- Destructive conflicts that last spread and fuel the conflict.
- Develop protective dynamics.

Attractor Narrative...

- **Intractable conflicts** = strong, fixed-point **attractors** for destructive conflict
- **Self-organizing!**
- Evidence:
 - High coherence
 - Low positivity-negativity ratio
 - Low adaptivity (responsiveness to change)
- However, **latent attractors** develop
 - Accumulation of discarded-repressed information (IAT).
 - Correspond to hidden potentials that exist in the system.





The 56 Essences of Intractable Conflict

- A severe imbalance of power between people or groups.
- A history of colonialism, racism, sexism, ethnocentrism, or human rights abuses.
- High Power Groups (HPGs) that manipulate Low Power Group's (LPG's) ethnic differences. Loss of control of meaning by HPGs (history textbooks, media, etc.). Delegitimization of hierarchy legitimating myths. Structural victimization (denial of identity, security & voice) of LPGs. Structural violence (unequal access to housing, healthcare, nutrition, education, etc.). An insulated and inattentive HPG. Pervasive patterns of "civilized oppression" by HPGs against LPGs. Periods of rapid social change and instability. Compromised institutions, laws and social norms for conflict regulation. Changes in LPGs aspirations. Power shifts between HPGs and LPGs. Ambiguity of power between groups. Anarchy – the complete collapse of social order. Dialogic poles: underlying issues that are rife with apparent trade-offs. Paradoxical dilemmas: Issues which, when resolved, create new problems. Intricate interconnections of issues: Complex connections between distinct issues. High centrality: Issues that have high personal or group-based importance. Truth: Issues that revolve around important, basic beliefs. Hub issues: Grievances embedded within broad beliefs, ideologies, and basic assumptions. Exclusive structures: Which keep groups isolated and without contact with one another. Inescapable relationships: Where it is virtually impossible to exit the situation. Destroyed relationships: Those that are damaged beyond repair by the conflict. Intense mixed-motives: High-stakes conflicts with a mix of cooperative and competitive goals. Intractable core: Fundamentally unsolvable issues. Polarized collective identities: Group identities based on the negation of the Other. Conflict Identities: Group identities that are organized around an ongoing conflict. Monolithic and exclusive identities: Where all different aspects of groups collapse into one. Frozen identities: Where personal and group identities become rigid and un-adaptive. Unconscious needs and defenses: Which are operative but difficult to identify and address. Intragroup divisions and factions: Where internal group divisions drive intergroup conflict. Hidden agendas: Covert or criminal objectives that drive the overt conflict. Humiliation, deprivation, loss, and rage: Toxic emotions that are pervasive. Loyalty and dignity: When a sense of duty drives the conflict. Socially constructed volatility: When group rules and norms sanction destructive emotions. High intensity: Impaired cognitive function that results from high intensity situations. Malignant social processes: Self-perpetuating, inescapable emotional dynamics. Escalatory spirals: Basic tit-for-tat escalatory dynamics that run amuck. Structural changes: When escalation changes social structures and perpetuates conflict. Moral exclusion: When groups see outgroups as deserving of immoral treatment. Violent exchanges and atrocities: When violence justifies and begets more violence. Pervasive: When the conflict spreads into functional aspects of life and transforms them. High complexity: When conflicts become too complex to comprehend. Multi-level: When conflicts link from people to groups to institutions to cultures. Multi-party: When increasing numbers of stakeholders contribute to the perpetuation. Chaotic and mercurial: When the constantly changing dynamics perpetuate conflict. Individual and community trauma: When communities lose the capacity to trust and function. Betrayal of trust: A rupture of basic understanding of a predictable world. Beyond PTSD: When atrocities lead to trauma beyond traditional forms. Trauma unaddressed: When past trauma is left untreated and festers. Historical rivalries: Long-term animosities between people and groups. Enduring cycles of low-to-high intensity: When shifts in intensity lead to complacency. Destructive norms: When hostilities and violence come to be expected and accepted. Intergenerational perpetuation: Where children and newcomers are socialized into the conflict. Lasting commitments: When their duration justifies their perpetuation.