

Social Complexity, Systems Thinking, and Leadership

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#### Social complexity – Exploration of primary schooling in rural India



The dropout rate for Class 10 in the country as of the academic year 2021-22 was 20.6 %, with Odisha recording the highest rate, followed by Bihar

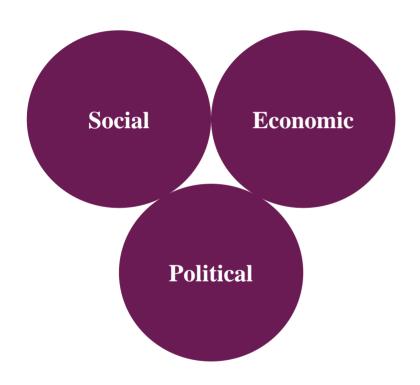
Odisha recorded a 49.9 % dropout rate, while Bihar had a 42.1 % dropout rate in Class 10.

What do you think creates barriers for students from going to school?

How can such barriers be overcome?

Source: NDTV Education

#### Social complexity – Analyses of primary schooling in rural India



- Financial constraints
- Lack of trained staff
- Lack of extra-curricular activities
- Improper sanitation
- Domestic violence
- Nutrition
- Clean water
- Government interference
- Teacher apathy
- Caste

So what kind of a problem is it?

#### Simple | Complicated | Complex





Complicated



Complex

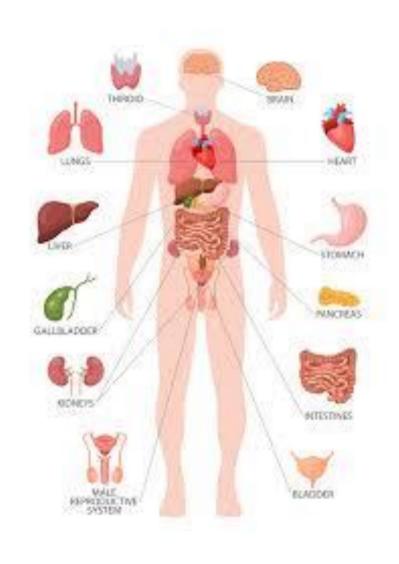
#### Wicked problems

Rittel and Webber (1973) identified 10 characteristics of wicked problems:

- A definitive formulation of the problem is impossible to arrive at
- These problems lack an inherent logic that signals if or when they are solved
- There are no right or wrong solutions, but only those that may be better or worse
- There is no way to test the solution to a wicked problem
- Outcomes of any intervention for a wicked problem are irreversible
- There is no end to the number of solutions or approaches to a wicked problem
- All wicked problems are unique and understanding of such problems is non-replicable
- Wicked problems always set a prelude to other problems
- Problem definition is more important than problem solving
- Practitioners cannot be held responsible if proposed solutions do not yield the desired results



#### What is systems thinking



**Boundaries** 

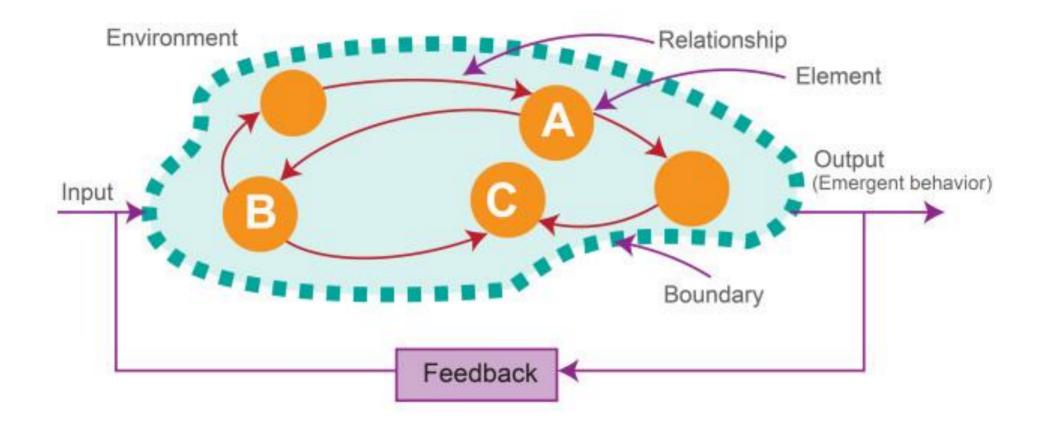
Interrelationships

Emergence

## Bird flock as emergence



#### Representation of a system



Boundaries | Interrelationships | Emergence

#### What does systems practice entail?

- Holistic thinking
- Focus on problem-structuring
- Stakeholder-led approaches
- Focus on empowerment
- Boundaries mindset
- Adopting different lenses to approach a problem

# While barriers are prohibitive, boundaries are protective

#### **Childhood obesity in India**

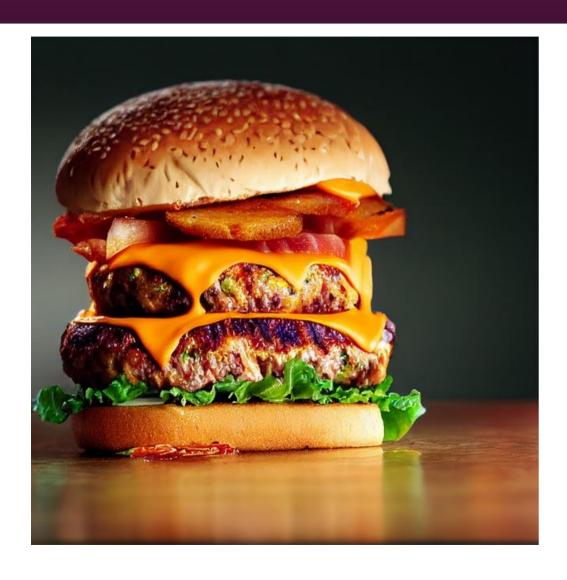


According to UNICEF's World Obesity Atlas for 2022, India is predicted to have more than 27 million obese children, representing one in 10 children globally, by 2030.

It ranks 99th on the list of 183 countries in terms of preparedness to deal with obesity.

The economic impact of overweight and obesity is expected to rise from \$23bn in 2109 to a whopping \$479bn by 2060.

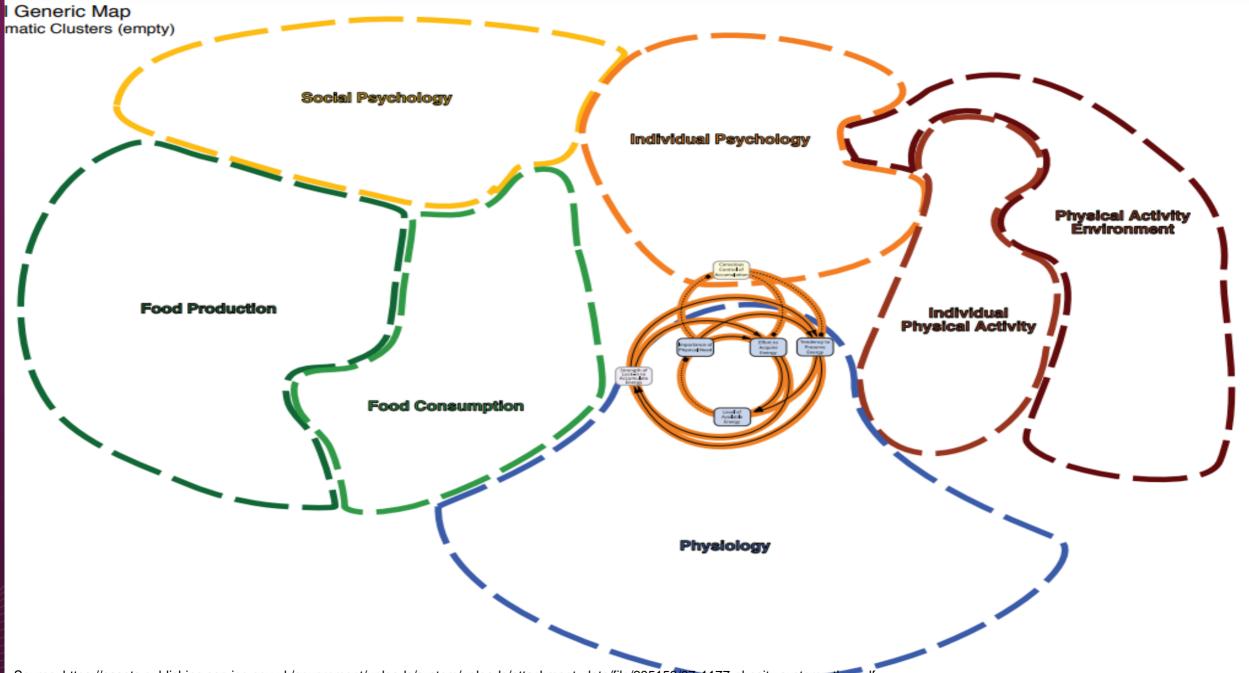
#### Obesity as a complex problem – an analysis

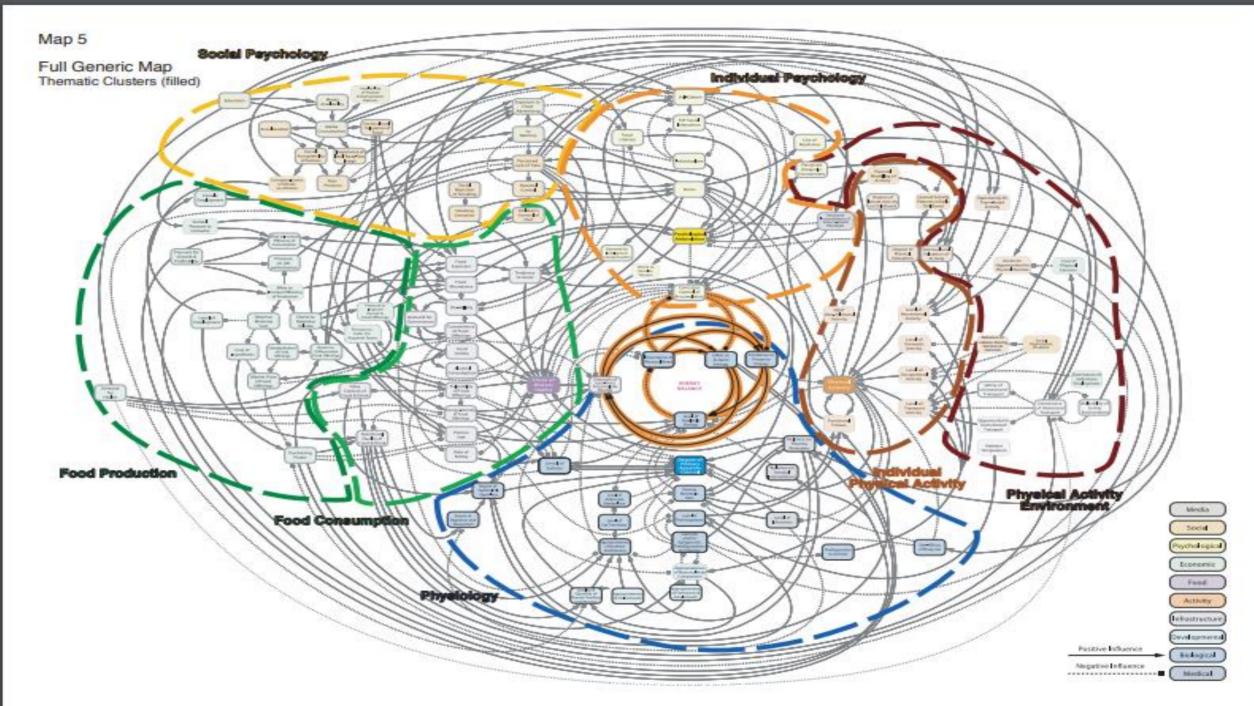


Now, consider obesity

What causes obesity?

How can you tackle obesity?





#### **Systems thinking lenses**



Machine



**Social/Environmental** 



**Cultural/Political** 



**Organism** 



**Interrelationships** 

# Who are your cherished leaders and why?

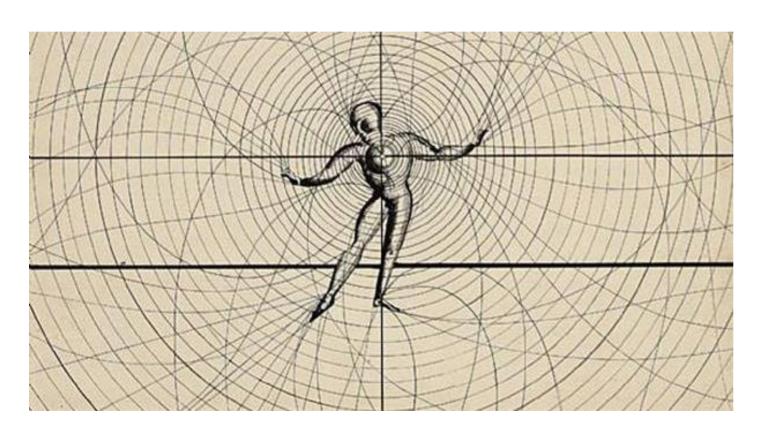






Leadership not as authority but as practice

#### Obesity as a complex problem



A set of practices or activities that some people do some of the time.

Mobilises self and others to adapt to new realities or face tough challenges.

#### **Leadership practice**

- Leadership is an emergent process
- Leadership a product of adaptive outcomes
- Leadership is fraught with the omnipresent possibility of breakdown
- Its emergence is always contested, partial and tentative

#### Leadership practice example



Recipient of the Diana Award, The King Constantine Medal, MIT Solve Grant, and selected as an artist for display at the UP COP26 conference, Taarush has worked on several projects, including **Volanity**.

#### Leadership practice example

"I volunteered extensively online – conducting classes with 5 different NGO schools. During this time, I also observed my mother teach history to underprivileged students online as well. Over the seven months that I conducted these classes, I understood the issues that arise to deter keen volunteers – back–and–forth cold emailing, scheduling, class size, safety terms, and conditions, lecture content verification, etc. which would kill the enthusiasm of the volunteer," says Taarush.

Volanity is an automated tech platform that connects more than 260 students and university volunteers to teach non-academic education and 21st-century skills to underprivileged students at 23 government and non-government partner secondary schools across India.

"I interviewed the founders and/or directors of 43 government and non-government organisations across India, 132 students at the NGO Schools, and 97 student volunteers individually to understand their user pain points," adds Taarush.



#### **Position vs Practice**

... you don't need to be in a leadership position to be in a position to practice leadership

## Demonstration of leadership



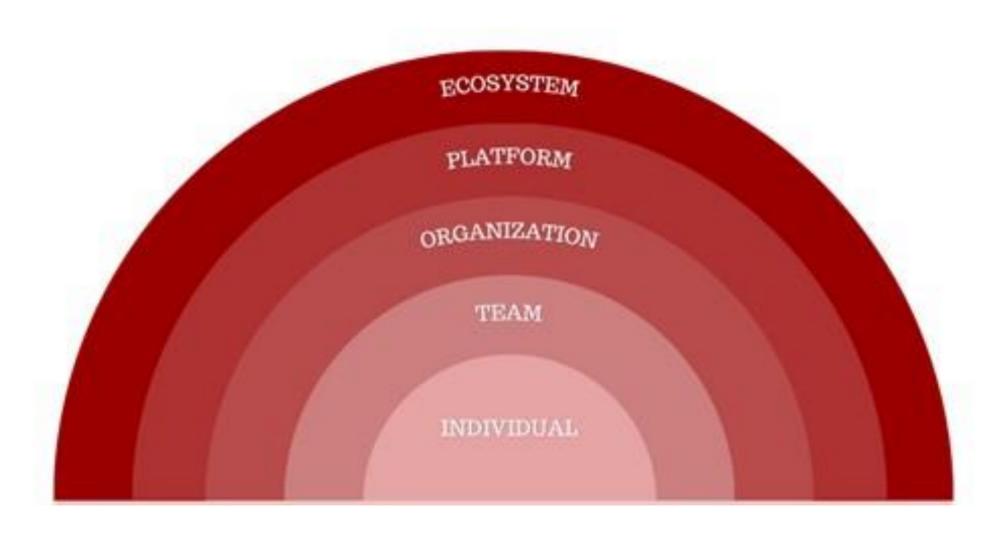


#### How can you practice leadership?

- What challenges doe you see around you?
- How can you look at these challenges as opportunities?
- What role can you play in addressing such opportunities?
- What roadblocks will you face?
- How can you overcome them?
- Whose guidance, support, and help will you need in this journey?



#### Considering self and the other with a boundary lens







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