



Faculty of Design

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## Using systemic design for the understanding and evolving of organizational culture: Mapping, framing and characterizing organizations from a systemic perspective

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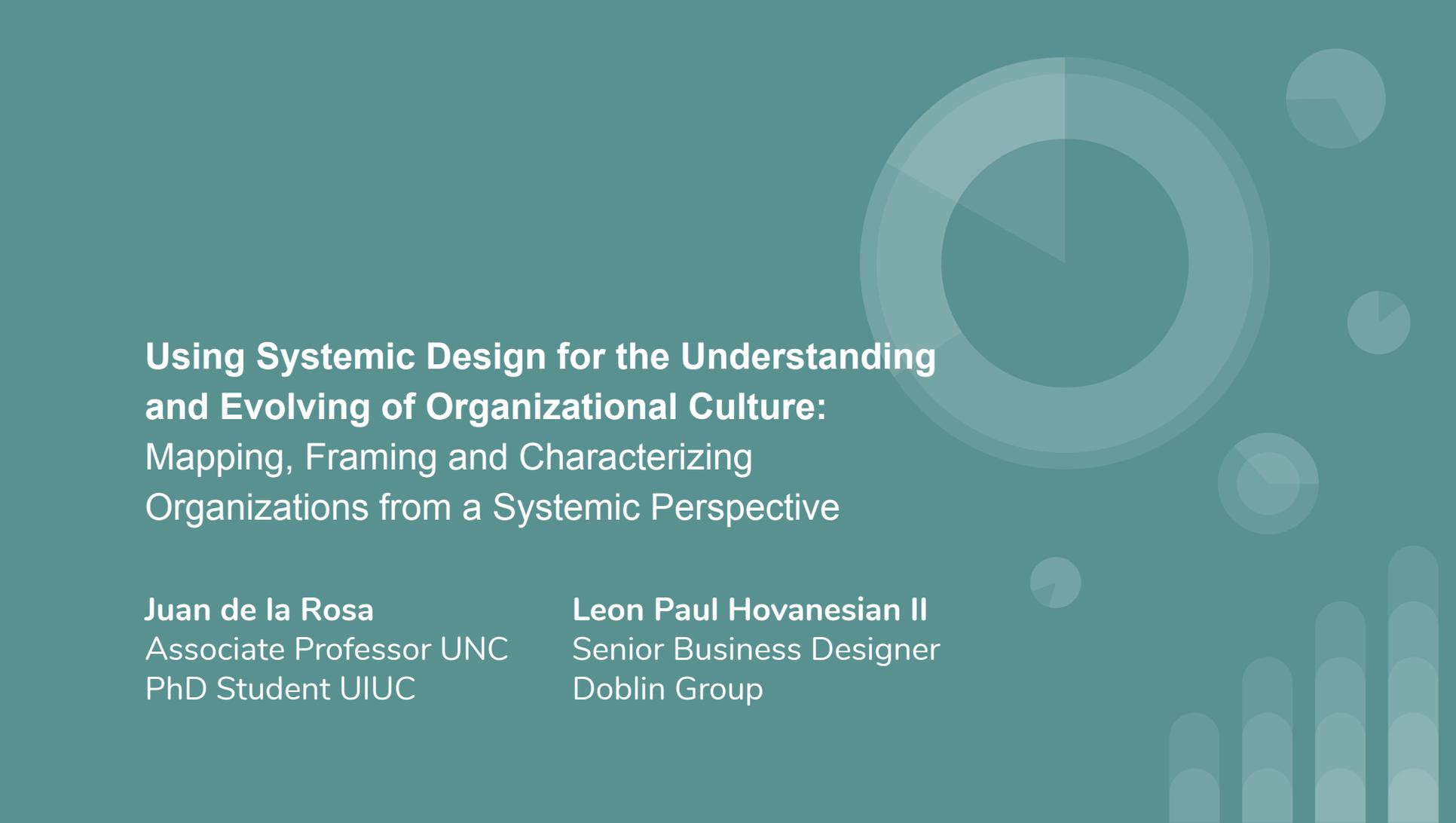
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**Using Systemic Design for the Understanding  
and Evolving of Organizational Culture:  
Mapping, Framing and Characterizing  
Organizations from a Systemic Perspective**

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## Organizational challenge

*Organizations are constructed as a system of ideological beliefs that irradiates a socio-technical system, that eventually transform the organization through their interactions over time.*



# Organizational challenge

An observation of the current organizational climate shows that:

- Economic systems have been moving **from the production and manufacturing age to a service economy**, (Gallouj, 2002; Buera & Kaboski, 2012),
- **Automation and AI are changing the notion of human capital**, and encouraged the idea of a so-called “fourth industrial revolution” (Schwab, 2017)
- Large multinational organizations struggle to outfit their businesses to **be digital, agile, and responsive to change**. Notion of speed of change and adaptability are defined in a different scale

Companies face a completely different challenge today: to stay alive and current in a rapidly changing market. But, it is no longer enough just to build new digital capabilities or adapt existing assets to work in connected digital ecosystems, but instead **help their human capital adapt to the rapid pace of change**.



# Organizational challenge

Design thinking has been broadly accepted by organizations as a tool to evolve and innovate in the market.

*We argue that there is a need to promote a change in organizations to move from Design Thinking practices to Systemic ones.*

- Even though current organizational practices have started to recognize the value of a systemic assessment or their cultural values in the planning process for strategic actions (Deserti & Rizzo, 2014) but common practices still underestimate the role of organizational culture in the definition of strategic plans for innovation (Muczik, 2004).
- There are few models or methods that can help designers really evaluate the real human-centered condition of the organization and the specific areas that might require the design intervention (Ringer & Robinson, 1996).



# A need for systemic analysis

Using Sevalson (1999) argument, we find three initial statements to support this research:

1. The possibility of design to use practice as a laboratory for research
2. The need for design practices to establish protocols for systemic analysis
3. The ability of visualizations to provide insights about a complex problem



# Organizational culture as a value system

Based on the observation of design practice, we argue that strategic actions and the fitness of an organization to survive are not based on sole numbers or indicators, but on the internal composition of the organization and the values and forces that define its nature and position in the sector.

**The value system of an organization requires systemic tools for analysis and observation.**

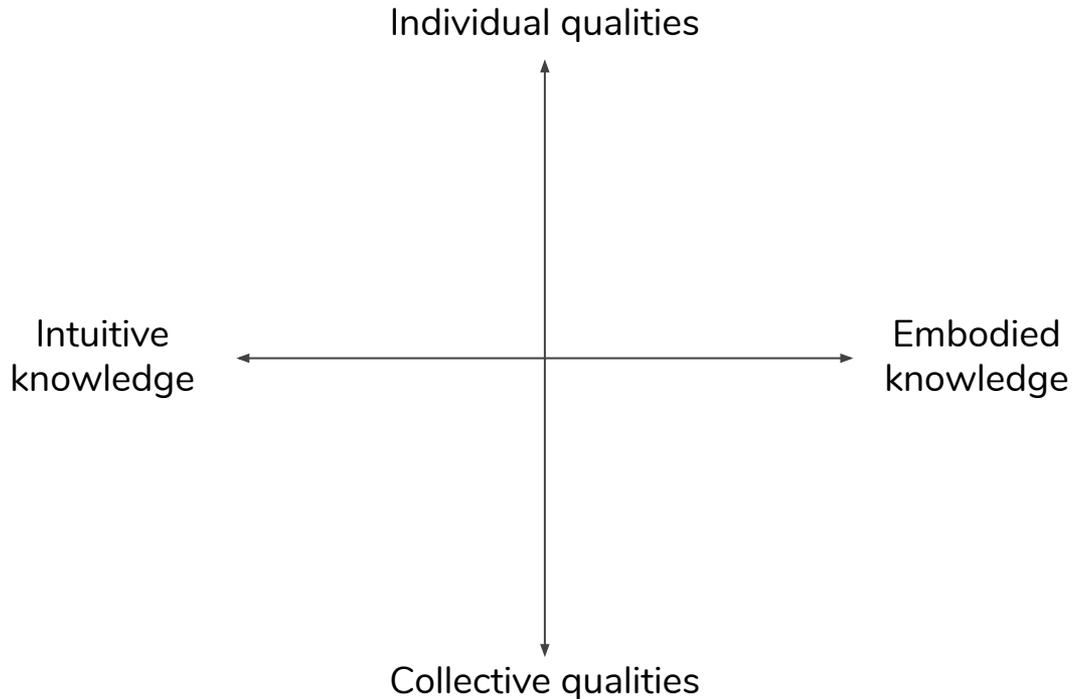


## **Case of study**

*Model for evaluation of the value system of an organization as an indicator of adaptive health levels.*



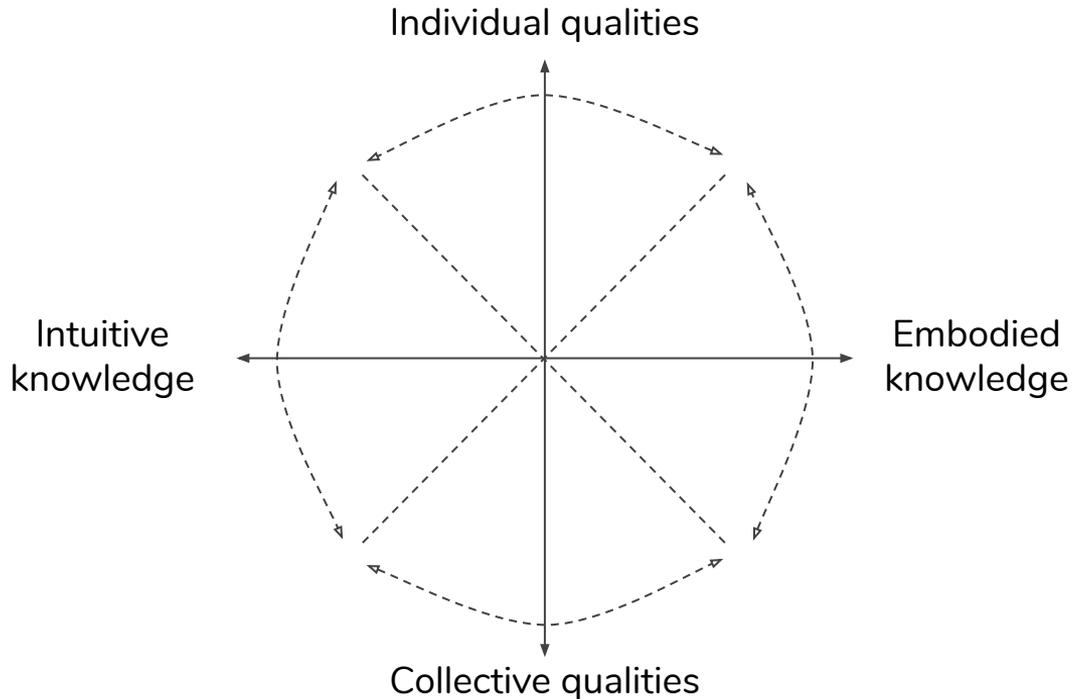
# Mapping and visualizing a value system



A cartesian matrix helps representing the main forces in the organization system.



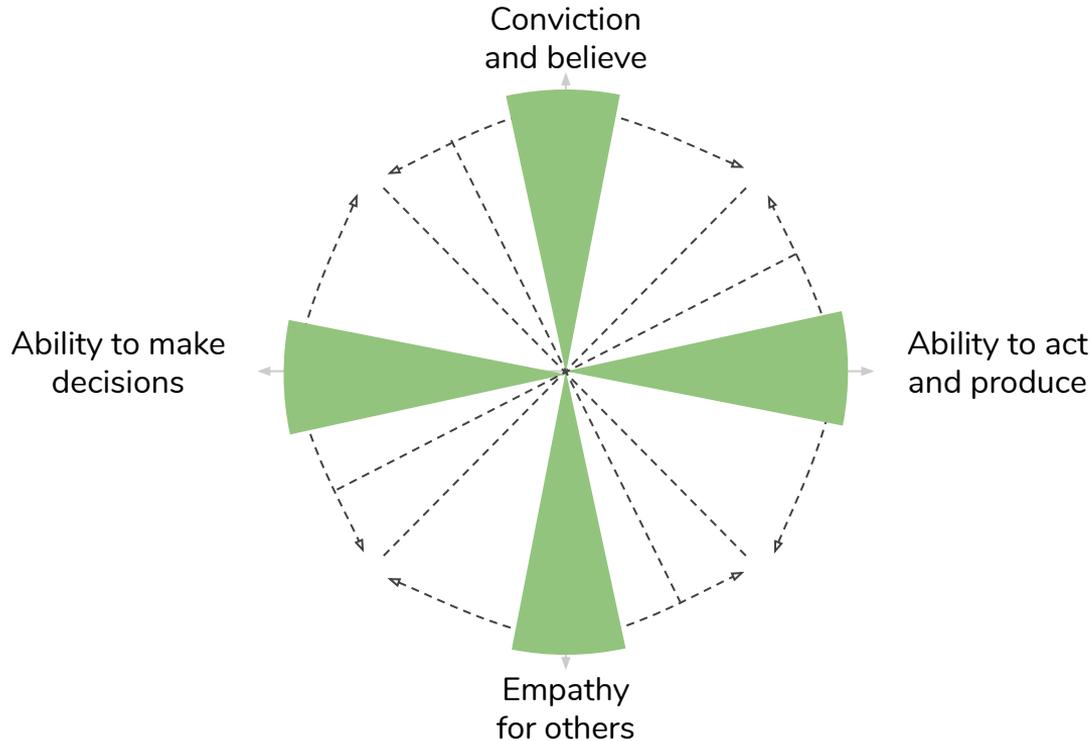
# Mapping and visualizing a value system



Each one of these vectors implies a range of action inside the system and a relationship of complement with the opposite side.



# Mapping and visualizing a value system



The definition of forces allow us to recognize specific areas or concepts that interact as part of the system.

# Mapping and visualizing a value system

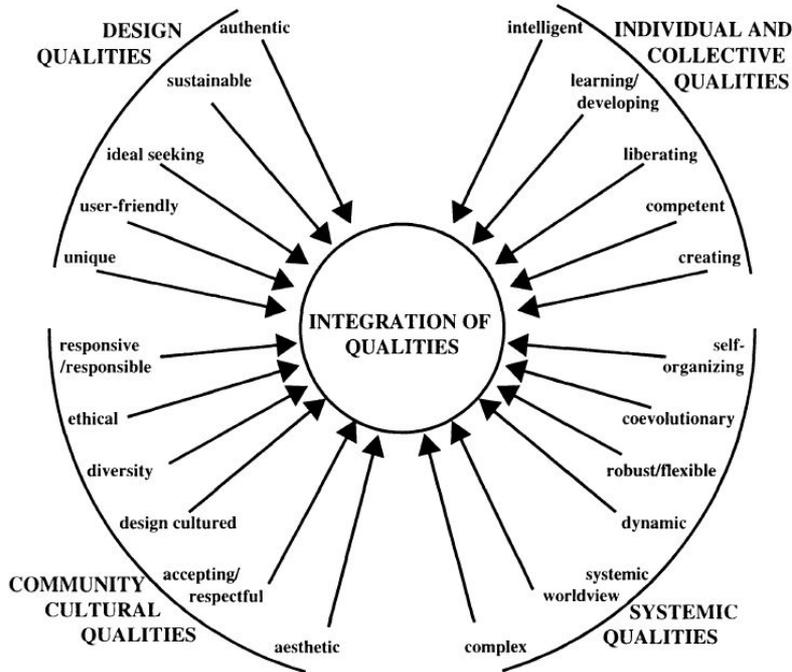
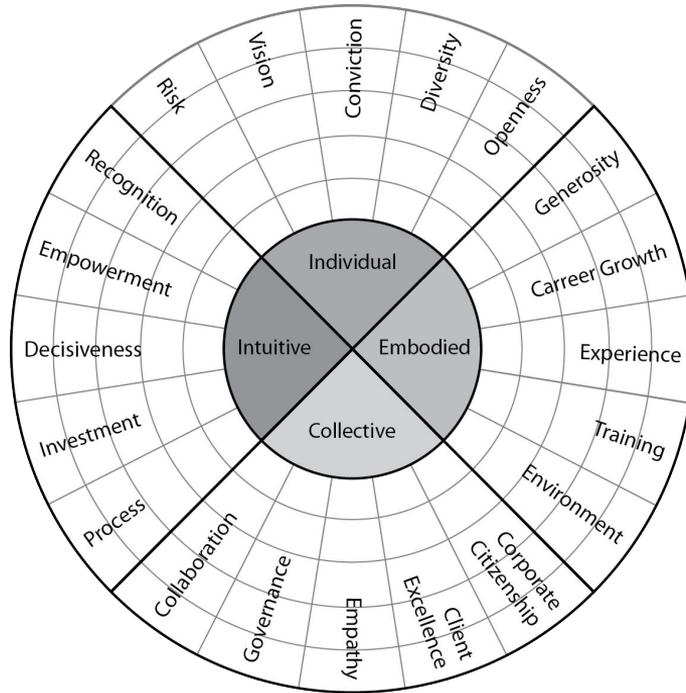


FIGURE 6.3. An image example.

Banathy (1996) proposes the use of a circular model to represent the value system in design values, and define these forces as markers of the system.

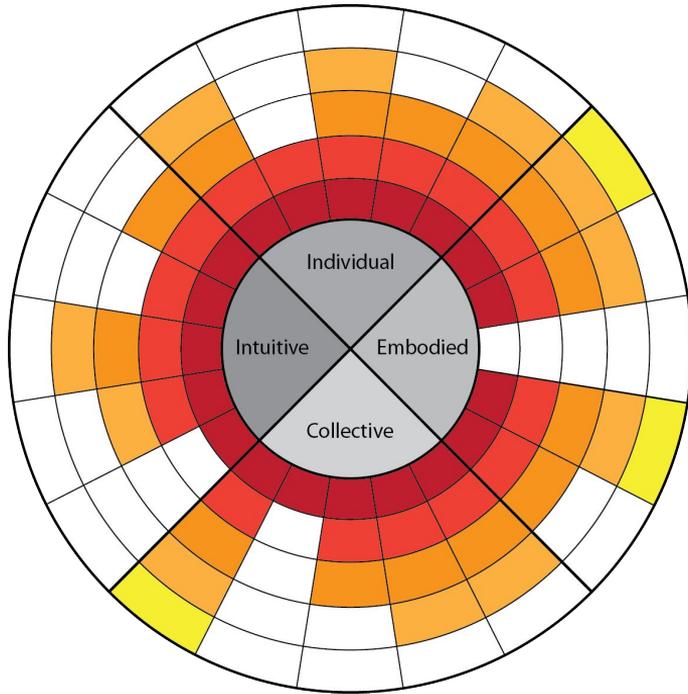
# Mapping and visualizing a value system



Using the internal forces of the system, the model proposes the definition of sectorized markers to evaluate the current state of the organization.

We have established an initial model of twenty systemic factors. Each one represents a sector where the organization can be measured to reveal the health level of its OC.

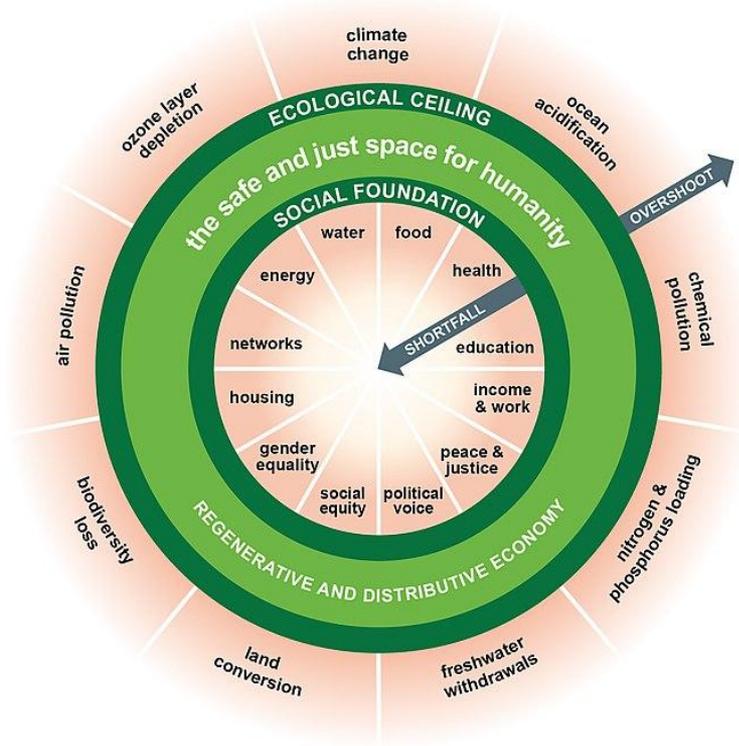
# Mapping and visualizing a value system



Each one of these markers is analyzed and evaluated through the use of qualitative research.

Values of the markers are calibrated to the specificities of each organization or group. Then, a systemic map of the markers of the corporate culture is produced to visualize the current state.

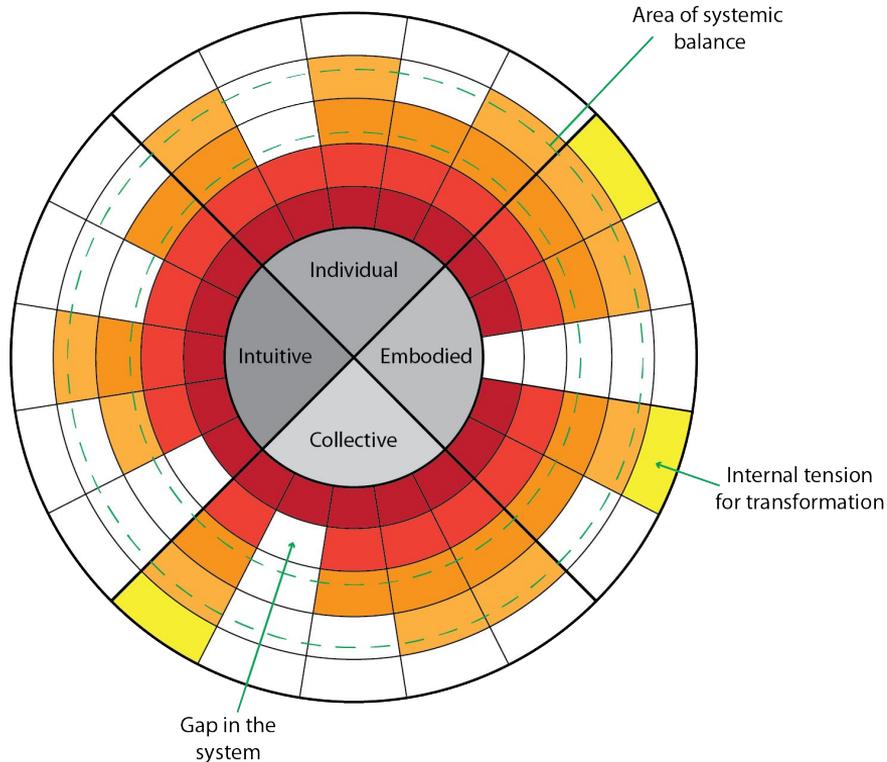
# Mapping and visualizing a value system



Raworth (2017) argues for a systemic view of economics where forces are evaluated based on the definition of balance among them.

Both low and high values are view as a problem of sustainability.

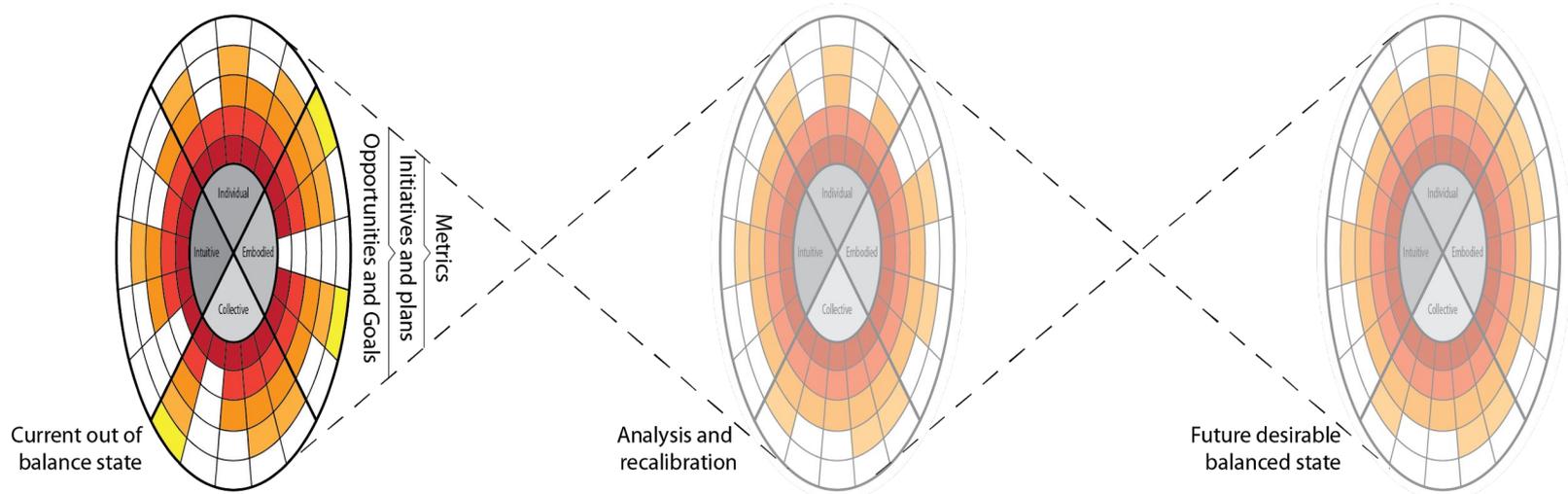
# Mapping and visualizing a value system



In the same way and based on the initial analysis, balance is defined based on the limits, tolerance and intentions of the organization.

Gaps in the system and areas of excess are used to define the needs and intentions for transformation and to produce an actionable Road Map.

# Mapping and visualizing a value system



Designers help organizations determine their goals and opportunities, and define actions and metrics to reach a balanced state.



## Initial results

Initial testing of this model in real cases have proven to be successful in producing a more complex map of the factors that define the organizational culture, and therefore, allow a better response from the design team in the definition of possible strategies to reach a more balanced cultural situation.

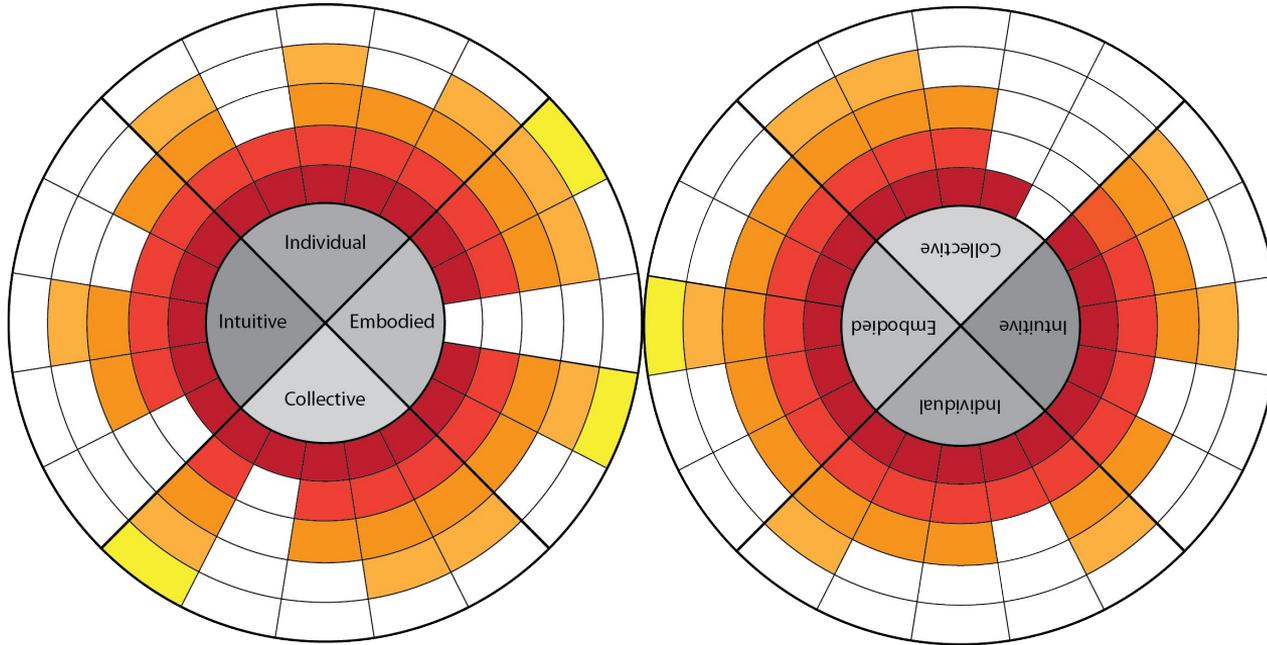


# Future spaces for strategic action

Understanding the organizational culture as a system determined by relational interactions and values, allow us to recognize possible roadmaps of transformation, and anticipate possibilities for strategic alliances.

Scalability allow us to preview other ways in which this model can be used as a tool for systemic transformation, form a micro scale of analysis, to a macro scale for strategic movements.

# Future spaces for strategic action



Using the tool inside an organization could help them recognize possible internal alliances between different groups with different needs and strengths.

# Future spaces for strategic action

Organizational culture balance could then be achieved either by the strategic partnership of groups inside the organization, as well as strategic alliances with other organizations.





# Future spaces for strategic action

We also argue that systemic analysis of the organizational culture can provide better insight about possible internal shifts of the company, and opportunities for innovation, like the definition of new business opportunities presented by organizational strengths.

Future research in the use of this tool can provide more information about possible uses and scalability of the tool.

# Thanks

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