

II - ANTICIPATORY GOVERNANCE APPLIED TO PUBLIC GOODS

The UNESCO Chair in Sociocultural Anticipation and Resilience has been participating in the design and implementation of a research-learning-action (IAA) process to strengthen anticipatory capacities in water governance within *GovernAgua. Transforming water governance in South America: from reaction to adaptation and anticipation* Project (SARAS, Uruguay; IEE / USP, Brazil; IMASL-CONICET, UNSL and IPEEC-CONICET-CENPAT, Argentina, with other collaborative institutions) in basins of these three countries.

Problems in the creation and flow of information and knowledge, as well as in coordinated action in the society-academy-politics channel, are among the topics of greatest interest to be resolved. Adjusting, sharing and creating information and knowledge so that it is useful for decision making is already a great challenge. To be done from anticipation redoubles the challenge. To do this, multiple dimensions of the problem must be taken into account, many of which have to do with the 'use of the future' as anticipatory systems and assumptions; and the cognitive, conceptual and heuristic frameworks that are used.

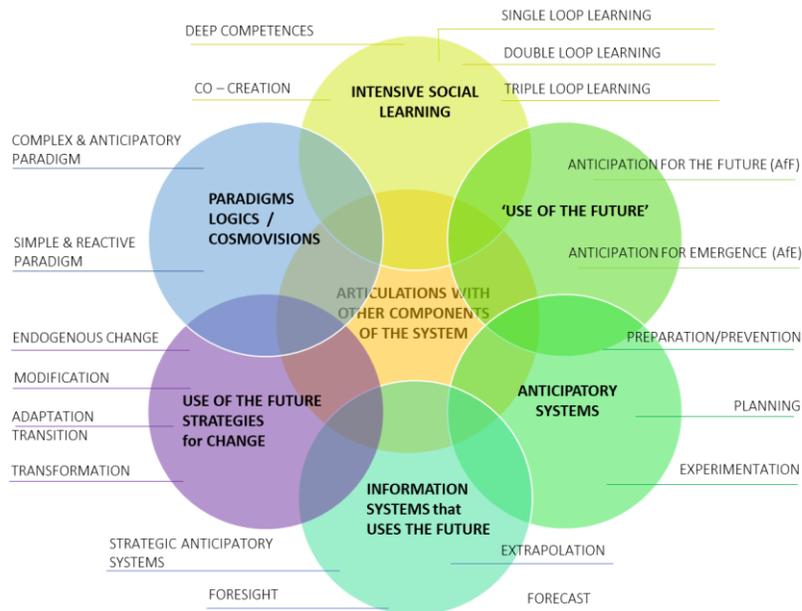
That is why we have designed and are testing a conceptual and heuristic framework for learning and transformative action at the level of collective skills and competencies. It works at the level of frames of reference (meta-frames of meaning), fostering critical reflection and reframing (Mezirow, 1997, 2000). A second component addresses social learning from iterative and recursive processes (loop learning, Argyris and Schön, 1974, 1978). A third and fourth components address the 'use of the future' and anticipatory systems (based on developments led by UNESCO, Riel Miller, 2018), paying attention to anticipatory assumptions that intervene in the way we see options of choice in the present (here is a direct relation with decision making). A fifth component addresses the different instruments for the 'use of the future' as anticipation in the present, their relevance and articulation (different approaches and techniques in the area of futures studies). And a sixth component addresses the different strategies for change, from simple reform, through actualization, to adaptive transitions and even disruptive transformations, (although not necessarily as part of a single stepped process, they can occur simultaneously). The framework seeks to dialogue with developments in polycentric governance by Elinor Ostrom and Claudia Pahl - Wostl and developments in resilience of the SRC (Stockholm Resilience Center) led by Carl Folke. The focus is on anticipation - as systemic property, capacity and competence - at the base of learning processes, creativity, adaptation and resilience.

It is a concrete contribution for decision makers, as well as for the design and management of transformational processes, as for the strengthening of anticipatory and adaptive capacities extended in the territory. It allows to show emerging issues and deep aspects of this complex problem, less visible in an obvious way, related to aspects of the configuration of 'reality' (how problems are seen and posed, the construction of shared meaning, the communication and generation of trust, inclusion and leadership, the generation of inter and transdisciplinary knowledge based on the diversity of knowledge/experiences and the relationship that all of it has with the 'use of the future', understood as imagination and anticipation in the present.

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ANTICIPATORY COMPONENT

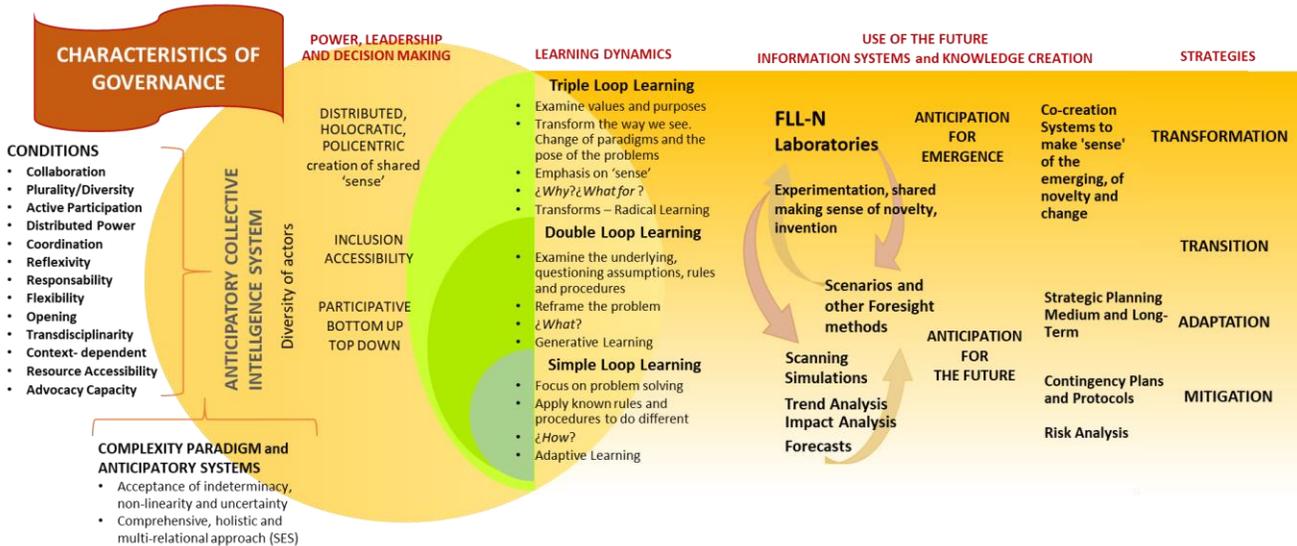
graphic recognition of different dimensions and descriptors



Garrido, 2020
Based on FLF, Miller, 2018

ANTICIPATORY GOVERNANCE

correlations and articulations



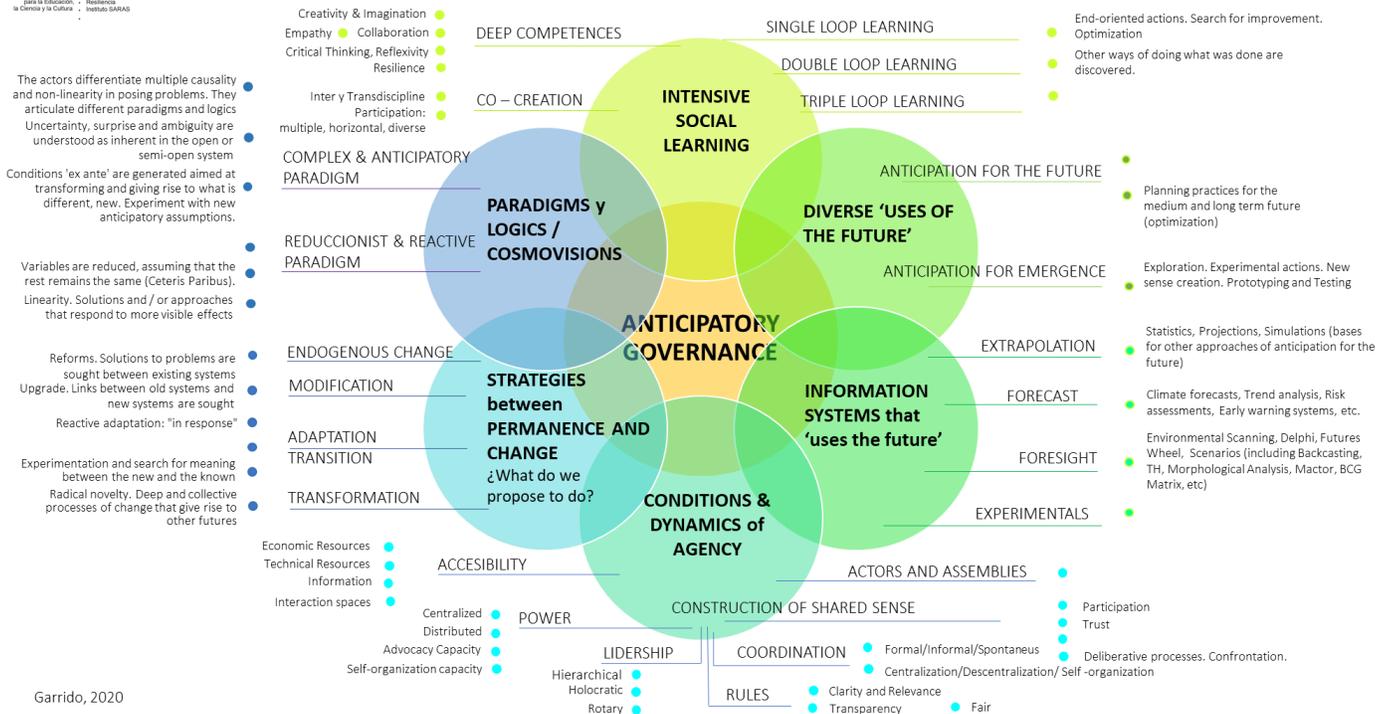
NOTE for chart reading:
Titles: diverse components
Correlations: horizontally
Articulations: vertically and horizontally
Comprehensive: from above to below (resignifying)

Garrido, 2020

ANTICIPATORY GOVERNANCE: refers to the ways and means by which a society or group defines, raises and makes decisions about problems and objectives that are common to it. It is understood as an extended social capacity, a 'collective intelligence system' that is organized as an assembly of actors, procedures and technologies, based on processes of intensive learning and co-creation of knowledge. It has the particularity that it 'uses the future' in the present in a literate way - it distinguishes and articulates various methods, reasons and contexts - to better inform decision-making and guide action, mainly in conditions of novelty, emergency, vulnerability, uncertainty, ambiguity and complexity.



ANTICIPATORY GOVERNANCE graphic recognition of different components, descriptors and proxies



Garrido, 2020

RELATED DOCUMENTS to the CONCEPTUAL-HEURISTIC FRAME:

- “Entre cambio y permanencia, un marco general conceptual-heurístico para procesos transformacionales”. SARAS, Bella Vista, Uruguay. Lydia Garrido (2020).
Link: <https://drive.google.com/drive/u/0/folders/1g4pgMPKb-lbQy5HJQ5392-sj-HNXuPWK>
- “Uso del Futuro. Bases conceptuales para el análisis de la capacidad de adaptación y anticipación en sistemas socio-ecológicos.” SARAS, Bella Vista, Uruguay. Lydia Garrido (2020)
Link: <https://drive.google.com/drive/u/0/folders/1g4pgMPKb-lbQy5HJQ5392-sj-HNXuPWK>
- “Aplicando el marco conceptual-heurístico para transformacionales al caso de la cuenca del VIRCH.” Lydia Garrido y Lara Mac Donnell.
Link: <https://drive.google.com/drive/u/0/folders/1g4pgMPKb-lbQy5HJQ5392-sj-HNXuPWK>
- “Sensing and making-sense of Futures Literacy: towards a Futures Literacy Framework (FLF). Chapter in book: *Transforming the Future. Anticipation in the 21st Century* (pp 15-50). Miller R (2018).
<https://www.taylorfrancis.com/books/e/9781351048002/chapters/10.4324/9781351048002-2>
- “Reconfiguring Water Governance for Resilient Social-Ecological Systems in South America”. Chapter in book: *Water Resilience, Management and Governance in Times of Change* (pp.113-135) Micaela Trimble , Pedro Jacobi, Tomás Olivier, Miguel Pascual, Ismael Díaz, Cristina Zurbriggen, Lydia Garrido, Néstor Mazzeo (2020).
<http://www.iai.int/en/post/detail/transforming-water-governance-in-south-america>

OTHER DOCUMENTS:

- Aportes al Plan Director de Agua y Saneamiento de OSE para el departamento de Maldonado, Uruguay. Convenio OSE-SARAS. Néstor Mazzeo, Micaela Trimble, Lydia Garrido et al (2018)
http://www.mirador.cure.edu.uy/proyecto_ampliado.php?id=103
- “Monitoreo y evaluación de la capacidad de adaptación al cambio climático: cómo aprender haciendo y sus implicancias en la toma de decisiones” *Policy Brief* proyecto LatinoAdapta. Néstor Mazzeo, Ismael Díaz, Lydia Garrido et al (2019).
http://saras-institute.org/wp-content/uploads/2020/05/PolicyBrief_IndicadoresCambioClimatico_Mazzeoetal_2019.pdf
- “Aportes al diseño de políticas públicas vinculadas a la vulnerabilidad de los sectores productivos al cambio climático”. *Policy Brief* Futuro Latinoamericano y FAO. Ismael Díaz, Cristina Zurbriggen, Lydia Garrido (2019).
https://www.researchgate.net/publication/339271333_Aportes_al_diseño_y_evaluación_de_políticas_públicas_vinculadas_a_la_vulnerabilidad_de_los_sectores_agricolas_y_ganaderos_al_cambio_climatico_Quito

TRANSFORMING WATER GOVERNANCE IN SOUTH AMERICA: FROM REACTION TO ADAPTATION AND ANTICIPATION

- SARAS, South American Institute for Resilience and Sustainability Studies (SARAS)
- Institute of Energy and Environment, São Paulo University
- San Luis Institute of Applied Mathematics, National University of San Luis
- Patagonian Institute for the Study of Continental Ecosystems
- Global Water Partnership (GWP), South America
- International Hydrological Program - UNESCO
- ICLCI South America – Local Governments for Sustainability
- The Nature Conservancy
- National Directorate for Environmental Management of Water and Aquatic Ecosystems (Argentina)
- Provincial Institute of Water of the Province of Chubut (Argentina)
- Ministry of Environment and Control of Sustainable Development (Chubut, Argentina)
- Ministry of Environment, Countryside and Production (San Luis, Argentina)
- AGEVAP Agency, Brazil
- Agencia das Bacias PCJ, Brazil)
- National Secretariat of Environment, Water and Climate Change, Uruguay)
- National Directorate of the Environment (DINAMA-MVOTMA, Uruguay)
- National Water Directorate (DINAGUA-MVOTMA, Uruguay)

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Documents: <https://drive.google.com/drive/u/0/folders/1g4pgMPKb-lbQy5HJQ5392-sJ-HNXuPWK>