



CoCo Seminar Series Fall 2024

Moving with Uncertainty in Complex Thinking Choreographies: Tools and Strategies for Inter and Transdisciplinary Research and Practice with 'Real-World' Complex Systems

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[Online] (Zoom; meeting link available on <http://coco.binghamton.edu/>)

In this presentation, I will introduce a theoretical framework for understanding and guiding the practice of Complex Thinking, that builds from an embodied and enactive view of cognition, and aims to guide practice and interventions aimed at promoting or managing positive changes in real world social and ecological systems in conditions of high complexity and uncertainty. This framework defines Complex Thinking as a mode of coupling between and Observer and their environment or Target System of Interest that (i) attends to (describing, explaining, anticipating) and recognises properties attributed to complex systems and (ii) enacts and performs such properties as contributions to a complex coupling relation with a given target system of interest, showing an congruent organisation with the principles organising natural and social complex systems, namely creative emergence. I will present some of the theoretical, empirical and methodological challenges posed by the framework and its developments. I will present a set of innovative research and practice tools, including the Relatostopes and the Complexigraphies, that have been developed to support practice and research in different contexts. I will lay out a variety of research questions and challenges currently being explored and still to be tackled and opportunities for mixed methods and interdisciplinary research. I will then open a discussion about the need and requirements for deep and true inter and transdisciplinary research approaches in the domain of Complexity and the pressing need to increase the Complexity of Complexity Sciences themselves and their transformative potential to affect "real-world" contexts.

Ana Teixeira de Melo obtained her PhD in Clinical Psychology from the University of Coimbra. She is interested in processes of human flourishing and well-being, positive change and development and resilience, in Families and Communities. She adopts a Systems and Complexity-Informed approach in her studies. She has developed and investigates a framework for the practice of Complex Thinking in managing interventions with real world systems. Her work also encompasses themes related to Interdisciplinary Methodologies and Methods and Inter/Transdisciplinarity processes, in relation to scientific creativity and abductive modes of knowing, and other themes of the Philosophy of Sciences. She is an elected Vice-President and Secretary and a member of the Executive Committee and of the Council of the Complex Systems Society.

For more information, contact Hiroki Sayama (sayama@binghamton.edu).

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