CALL FOR PAPERS OR PARTICIPATION –
IMAGINATION & TRANSFORMATION

As part of the 2015 Conference on Complex Systems at Arizona State University we will host a full-day workshop on

Imagination and Climate Change –
Cognitive Skills for Complex Problem Solving and Transformational Change

on Thursday, October 1st, 2015 (9am-6pm). We would like to invite submissions for papers, activities, and indications of interest in participation.

1. Workshop Description

The workshop will bring together experts on and students of imagination and transformation from a wide range of disciplines in the natural and social sciences as well as the humanities. Our goal is to develop a shared, interdisciplinary understanding of the linkages between imagination and transformation processes to answer questions such as: What is the role of imagination in triggering, supporting or preventing social-ecological transformations in response to complex problems, such as climate change? How do observed transformations affect individual-cognitive and collective-social imagination processes?

The session’s theoretical work will focus on the development of a framework linking concepts related to imagination and transformation. Such a framework could serve as the conceptual core of a future research program, but also guide practitioners, e.g., when designing interventions to facilitate deliberate transformations in specific social-ecological systems.

The session’s case study focus will be on climate change, although we welcome other case studies in the area of sustainability. We are interested in a particular type of imagination: ideas about the future that provide the foundation for political decision-making processes and behavioral changes in the present.

(More contextual information can be found at the end of the document.)

Questions for presenters and discussions could include:
1. What cognitive-emotional and social-political processes produce collective imaginations concerning climate change and the future?
2. In what sense is imagination a complex (cognitive or social) phenomenon? Can complex systems frameworks illuminate the nature of imagination?
3. What is the role of imagination in: i) political decision-making related to climate change? ii) mobilizing for, supporting and navigating deliberate social-ecological transformations?
4. (How) Can one build imaginative capacity/ability? Can one “get better at” imagining? And is that “better” to support potential transformations?
5. How can art ((non-)fiction writing, music, visual art, movies, games) and technology affect and potentially support social imagination processes?

We would like to emphasize that this call is wide open to various fields of scholarship and (artistic) practice. This includes not only complex systems thinking and cognitive sciences, but also the environmental humanities and artists who engage the imagination, political scientists, sociologists and psychologists concerned with processes of social transformation, STS scholars or resilience and social-ecological systems scholars interested in systemic change processes.

The workshop will have several components, including two panel sessions, a creative exercise to explore the nature of imagination, and a session to plan future activities, possibly including a special issue on imagination and transformation.

2. Objectives

The workshop objectives include interdisciplinary theory development for a research program on imagination, transformation and climate futures, interdisciplinary network building, scoping of future (research) collaborations, and possibly the development of plans for special issue on imagination and transformation.

3. Call for Submissions

We invite three different kinds of submissions. Please send all of your submissions to Manjana Milkoreit (Manjana.milkoreit@asu.edu).

1. PAPER ABSTRACTS: We would like to invite paper abstracts for two distinct panels in the course of the day. Abstracts could focus on one of the key concepts only, e.g., exploring the nature of imagination, or address the relationship between imagination and transformation. Depending on the submissions, the panels will be organized around specific themes.

Abstracts should be up to 300 words long. Please include a title and contact information for all co-authors.
You are not required but encouraged to submit a draft paper to us before the workshop to allow a discussant to read it and provide feedback.

2. ACTIVITIES: Please make suggestions for a brief collaboration or improvisation activity that could be integrated into the workshop program. The aim of such an activity would be to advance collaborative outcomes at the session but also to increase opportunities to identify shared interests and ideas for future collaboration among participants.

3. ATTENDANCE: If you are interested in attending the satellite session, but do not want to present a paper, please let us know. We very much welcome your participation and will provide you with additional information (e.g., potential funding support for graduate students).

**Deadline** for both all submissions is **July 15, 2015** (by midnight, MST).

4. Time Line

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<td>Acceptance Decisions:</td>
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<td>Final Abstracts Due:</td>
<td>August 15(^{th}), 2015*</td>
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<td>Regular Conference Registration ends:</td>
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*Abstracts of accepted papers have to be submitted in pdf format to the conference registration system, Easy Chair, in order to become part of the program.

5. 2015 Conference on Complex Systems

The workshop (satellite session) is part of the 2015 Conference on Complex Systems. All workshop participants are required to register for CCS and are of course welcome to attend the full conference. This will include exciting keynote lectures, panel sessions, and networking opportunities.

Please note that early conference registration ends on June 30, 2015, long before we make any decisions concerning the workshop. If you plan to attend CCS regardless of your workshop participation, you might want to make use of the opportunity to register for a reduced rate.
For those interested, the session organizers would be happy to organize a hiking excursion to Sedona on the day after the conclusion of the conference (Saturday, October 3rd, 2015). Please contact Manjana Milkoreit if you would like to be included.

6. Context

We have entered a new era, the Anthropocene, where human activity has emerged as major force shaping the Earth system (Crutzen 2002; Steffen, Crutzen, and McNeill 2007; Rockström et al. 2009). From local to global scales, evidence is mounting that many human-environmental interactions have become “locked in” to unsustainable pathways (Folke et al. 2011; Scheffer, Brock, and Westley 2000). Consequently, interest has been growing about how to intentionally transform linked social-ecological systems (SES) so that these systems are set on new trajectories to ensure that wellbeing of both humans and a range of ecosystem services is sustained over time (Westley et al. 2011; Leach, Scoones, and Stirling 2010).

Imagination is essential to the ability of individuals and societies to create, design and bring about desired future trajectories. Given the planetary changes in progress at the beginning of the 21st century, the past is no longer a reliable guide to the future. Decision-makers and communities require very demanding mental skills to envision, assess, and make choices concerning the near- and long-term future. Key among these skills is the scientifically informed imagination of different possible futures, including phenomena that unfold slowly over decades or that contribute to reaching tipping points rapidly. Such imagination processes have to take into account not only available scientific knowledge and associated uncertainties, but also the dynamics of technological revolutions and complex social change. But at their core they are creative, social and cognitive processes, enabled and constrained not only by the functioning of the brain but also by the social, economic, political and environmental processes, decision-makers are embedded in. Currently very little is known about the nature of imagination and its role in potential transformations, for example in the context of climate change. Existing bodies of scholarship in natural and social sciences – esp. advances in the cognitive sciences – remain largely disconnected and have not yet linked to questions of political decision-making and social-ecological transformation processes.

Part of the motivation for this session is the observation that many decision-makers today, especially climate change negotiators at the global scale, lack the ability to imagine qualitatively different (i.e., non-linear) futures and often also lack an understanding of/concern about climate tipping points (Milkoreit 2012).

References


### 7. Organizing Committee

**Manjana Milkoreit**, Postdoctoral Research Fellow with the Walton Sustainability Solutions Initiatives and Director of the Imagination and Climate Futures Initiative at Arizona State University ([Manjana.milkoreit@asu.edu](mailto:Manjana.milkoreit@asu.edu))

**Michele-Lee Moore**, Assistant Professor in the Department of Geography, University of Victoria; Water, Innovation and Global Governance Lab ([mlmoore@uvic.ca](mailto:mlmoore@uvic.ca))

**Ed Finn**, Director of the Center for Science and the Imagination, Assistant Professor School of Arts, Media + Engineering and Department of English, Arizona State University ([ed.finn@asu.edu](mailto:ed.finn@asu.edu))