Dynamic change, uncertainty and planning for adaptivity

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This special session explores how interactions between the complexity sciences and the planning discipline can result in better understandings of and productive strategies for urban planning in a world of change. Cities and urban regions across the globe face a series of pressures and challenges.

One can think of global warming, processes of globalization, migration flows, technological innovations, geopolitical shifts, housing market affordability, changes in mobility and lifestyle, etc. A key question for spatial planners and governance experts is how to support cities and regions in remaining vital places under these conditions, knowing that the chances for planners to guide urban development towards predetermined, specific outcomes are inexorably limited, and that social-spatial complexity is something that must be preserved, and not fought or avoided. In other words, how to navigate uncertainty in catalyzing more sustainable, prosperous, resilient, and liveable cities. Introducing concepts such as self-organization, coevolution and bifurcation, the complexity sciences can help to clarify the interdependent, recursive and adaptive nature of processes underlying spatial transformations.

Therefore, this special session is about exploring ways to unwrap / disentangle / decode the 'complexity' of spatial systems and networks. Not with the aim of simplifying complexity, but with the ambition to identify the opportunities and limitations of strengthening the adaptive capacity of cities and regions in a context of dynamic change.

For this special session, we invite contributions that address:

- Non-linear perspectives on change that reveal the barriers and opportunities for improved futures;
- Advanced models that strengthen our understanding of, for instance, spontaneous pattern formations, processes of path-dependency and transition trajectories;
- Co-evolutionary strategies that leverage interdependencies to strengthen community capacities for resilience;
- Policy tools that utilise behavioural insights (such as nudge theory) to reveal hidden or underappreciated desires of citizens.