

From concepts and models to practice: discussing agency in urban metabolism studies

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This session discusses possible practical applications of the “aISTnexus” project, undertaken at the Urban Metabolism lab (UCLouvain/LAB), which aims to foster a pluralistic perspective on how the concept of “agency” shapes the understanding and modelling of the urban metabolism as an urban social-ecological system. The main outputs of the research will be a conceptual framework and a model decision tree spelling out which features of “agency” are embedded in different concepts, methods, and models emerging from urban metabolism studies. The project’s first work package analyses the notion of “agency” by identifying cognate concepts in the urban metabolism research literature. The second unpacks how this notion informs different modelling methods at various levels.

Based on their perspectives, experiences, and expertise, participants will thus be invited to reflect on how conceptual analysis and model characterisation of agency can jointly lead to improving modelling, assessing, and planning practices that rely, directly or indirectly, on the notion of “urban metabolism” by focusing on three questions arising from the project: Who or what is an agent? What do agents do? How are agents identified, conceptualised, and modelled?

More specifically, participants will have the opportunity to engage in a first round of “fishbowl” format discussions around two topics: (1) how the concept of agency can shape views of the urban metabolism and (2) how different forms of agency can be integrated within models of urban metabolic exchanges. Based on questions provided by the organisers as inputs, discussions will aim to collect perspectives on and experiences with both topics, which will then be shared in a general discussion round. Fundamental problems and insights will be collected and integrated within a collaborative framework aiming to bring the conceptual elucidation and modelling of the different forms of agency underlying the urban metabolism into urban design, planning, and management practices.

This work is supported by the Fonds de la Recherche Scientifique - FNRS under Grant(s) n° MIS-F.4536.22, Mandat d'Impulsion Scientifique / Incentive Grant for Scientific Research.