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DI TORINO



*University of Turin
Department of Culture Politics and Society
UNESCO Chair in sustainable development and territory management
Solars Laboratory
Culture of Sustainability Journal
Trust Project*

Friday 22/11/2019 10am to 5pm - Campus Luigi Einaudi, Room 3D233

Workshop

Building knowledge for change: methodologies and ontologies for investigating socio-metabolic regimes





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Despite the claims that promise a reduction of greenhouse gases to mitigate climate crisis, the accumulation of these gases in the atmosphere is increasing day by day as well as the consumption of nature, which is at the basis of climate heating. Reversing these social metabolic trends is first of all a scientific challenge since a good understanding of the factors at stake is needed in order to define effective strategies able to drive societies towards a stable de-carbonization. Beyond the mere quantification of the impacts of human activities, a deeper comprehension of the processes responsible for their production is thus particularly urgent. The policy and scientific community can rely on many well established tools to account for the inputs (energy and materials) and the outputs (waste and emissions) that shape the metabolism of socio-material systems (such as the 'Footprints family' or Material Flows Analysis or Life Cycle Assessment or again Input/Output Analysis). Notwithstanding the robustness of these approaches in terms of measurement of the societal impact on the planet, the social mechanisms from which this impact are likely to be produced still remain a black box, thus hampering any effort to reach a concrete sustainable turn. An interesting alternative in this respect is represented by MUSIASSEM - Multi-Scale Integrated Analysis of Societal and Ecosystem Metabolism. Being it the operationalization of an interesting narrative focused on the interaction among scales and functions of the social system, this approach is able to identify different metabolic patterns, measure their impacts on natural and social systems and assign them to specific social configuration.

The workshop aims at promoting an informed discussion among experts about MUSIASSEM with attention paid to present its current use and potential applications and to explore potential contaminations both from the methodological as well as from the conceptual side.

The first part of the Seminar aims to present the logic and the main operational tools that define MUSIASSEM approach with the objective of providing critical insights and remarks on this tool, in order to make clear its actual potential in identifying and meaningfully qualifying the material flows going throughout socio-material systems.

The second part aims to open up the black box of the social dynamics, organization and regulation of production/consumption complex by which these material flows are produced and steered. The comprehension of the social basis of the metabolic flows could mitigate or solve conflicts that, given the current structure of the metabolic regimes, may rise from the implementation of *sustainable policies*. What is often happening, in fact, is that as soon as some changes of these flows take shape, immediately people rise up against these changes. This shows how the road towards the decoupling between economic growth and material consumption is very hard to realize. In order to avoid a conflictual "politics of suffering" we need a new understanding of the way in which metabolic regimes influence social conditions of reproduction in order to find ways by which institutions and communities begin to regulate, plan, manage these flows on the base of socio-material justice principles.



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Educational, Scientific and
Cultural Organization



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Schedule

10.00 – 13.00 First session - Accounting socio-ecological systems: the Musiasem perspective

Introduction: Dario Padovan and Alessandro Sciullo

Opening speech: Mario Giampietro ICREA Research Professor at the Institute of Environmental Science and Technology (ICTA) of the Universitat Autònoma de Barcelona

Discussants

- Valeria Jana Schwanitz and August Wierling - Faculty of Engineering and Sciences, Western Norway University of Applied Sciences, Sogndal, Norway
- Silvana Dalmazzone – Economist – Dept. Cognetti de Martiis – University of Turin
- Marco Bagliani – Physicist and Geographer – Dept. Cognetti de Martiis – University of Turin
- Vito Frontuto - Economist – Dept. Cognetti de Martiis - University of Turin
- Fiorenzo Martini - Economist – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Cristiana Peano - Agronomist – DISAFA – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Marco Giardino – Geologist – Dept. Earth Science - UNESCO Chair in Sustainable Development and Territory Management - University of Turin

14.00 – 17.00 Second session - Managing metabolic flows and nature consumption toward decarbonization: regimes of regulation, social practices and conflicts

Opening speech: Mario Giampietro ICREA Research Professor at the Institute of Environmental Science and Technology (ICTA) of the Universitat Autònoma de Barcelona

Discussants

- Giulia Sonetti – Urban Planner – DIST – Politecnico di Torino
- Dario Padovan - Sociologist – CPS – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Alessandro Sciullo - Sociologist CPS – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Sergio Scamuzzi - Sociologist - CPS – University of Turin
- Mauro Bonaiuti - Economist Dept Cognetti de Martiis – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Mario Salomone - Sociologist - Culture of sustainability – UNESCO Chair in Sustainable Development and Territory Management - University of Turin
- Nicola Labanca - Physicist JRC – European Commission – Ispra
- Alfredo Agustoni – Sociologist - University of Chieti