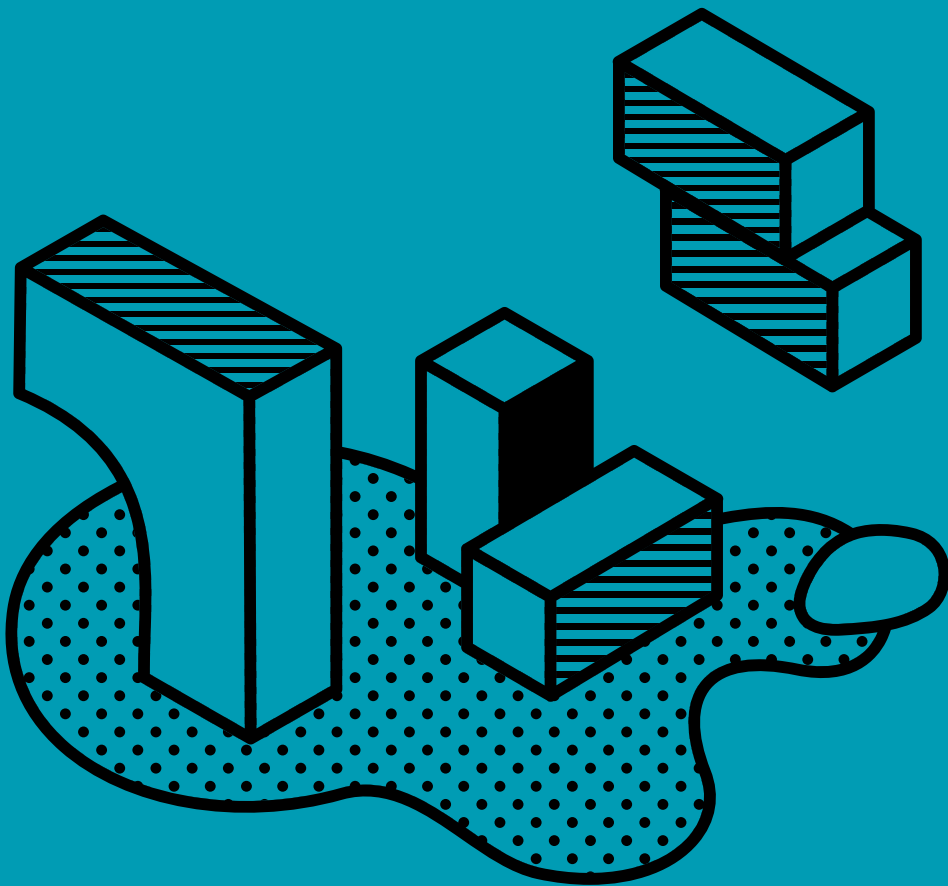


# Designing Brussels Ecosystems

Metrolab Brussels MasterClass II



Bernard Declève  
Geoffrey Grulois  
Roselyne de Lestrangé  
Andrea Bortolotti  
Corentin Sanchez Trenado  
(eds)



Metrolab series

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## Foreword

# Exploring urban ecology with Metrolab

Bernard Declève and Geoffrey Grulois

**This book presents the results of the second international MasterClass hosted by Metrolab in January and February of 2019, on the theme of urban ecosystems in Brussels. The event was the outcome of a transdisciplinary methodological reflexion on the relations between urban ecologies and urban policies. How can urban ecosystems be approached from a transdisciplinary perspective? How can urban projects such as ERDF be mobilized to initiate a socio-ecological transition? Before delving into these methodological questions, we would first like to put this project back into the Metrolab context.**

Metrolab is a transdisciplinary and inter-university laboratory for applied and critical urban research funded by the Brussels-Capital Region through its European Regional Development Fund (ERDF) programme (2014-2020). This new laboratory, created by UCLouvain (Université Catholique de Louvain) and ULB (Université libre de Bruxelles), is a collaboration between four existing research laboratories: CriDIS (social sciences), LOCI (architecture and urban planning), LoUIsE (urbanism, infrastructure and ecologies), and IGEAT (geography).

Metrolab offers a unique opportunity to experiment with new forms of transdisciplinary urban research, embedded in the practical and institutional setting of the Brussels-Capital Region. The European Regional Development Fund for the Brussels-Capital Region provided Metrolab with the means to conduct action-research studies as part of the 46 projects subsidised in the 2014-2020 programme.

The main objective of this academic support for ERDF is to test the ability of university researchers to offer reflection and coordination for urban policies such as ERDF. The objective is also scientific and epistemological as Metrolab seeks to test new scientific forms of engagement and positioning in urban research.

In terms of the themes covered, Metrolab's scientific programme is structured around three research themes: urban inclusion, urban ecology, and urban production, which follow the focuses of European urban policies and are in line with the social, environmental and economic dimensions of sustainable urban development. In terms of timing, these lines of research form three successive work cycles.

Reflections on the theme of urban inclusion began in December 2015. During the years 2015 and 2016, ethnographic surveys, mapping and co-design workshops were organized around several ERDF

projects in collaboration with local actors. These investigations on urban inclusion and hospitality in Brussels culminated in the In / Out Designing Urban Inclusion Conference and Masterclass organized in January and February 2017. The publication of the results of this Masterclass concluded by emphasizing the importance of the concept of “inclusive enclave” for urban policies.

The theme of urban ecology has been explored since 2017. For two years, it has given rise to seminars exploring the fields of political ecology, human ecology, metropolitan agriculture, urban metabolism, socio-ecological transition, etc. In October 2018, the Brussels Ecosystems international conference foresaw an integrated approach to environmental, social and political ecosystems. The Designing Brussels Ecosystems Masterclass was then planned as a testing ground for this transdisciplinary approach of urban ecosystems.

Each thematic cycle ends with a MasterClass where all members of Metrolab (researchers, coordinators, professors and administrators) apply methodological innovation to real-life situation and case studies in coproduction with stakeholders in the Brussels urban project (including actors in several Brussels ERDF projects). This means that the MasterClass is a unique moment for transdisciplinary experimentation and co-production: it calls upon the skills and knowledge of our researchers; it builds relationships with those in charge of ERDF projects and other urban projects; it experiments new methods for urban analysis, idea development, and urban project improvement. It allows international researchers in various disciplines (sociology, architecture, political science, landscape architecture, urbanism, geography, etc.) to gather in Brussels to reflect on the local ERDF programme and develop new and future-oriented suggestions aimed at improving urban policies.

This second Designing Brussels Ecosystems MasterClass explores the topic of urban ecology as part of a transdisciplinary methodological exploration of urban ecosystems and socio-ecological transition. How can urban ecosystems be approached from a transdisciplinary perspective? How can urban projects such as ERDF be mobilized to initiate a socio-ecological transition? The introduction to this publication defines the Metrolab approach to the concept of urban ecosystem and the methodology for investigating urban ecosystems. This methodology and the themes were defined by a group of researchers from Metrolab (Andrea Bortolotti, Bernard Declève, Geoffrey Grulois, Roselyne de Lestrage and Corentin Sanchez Trenado) in close collaboration with a scientific committee of local and international experts (Elena Cogato-Lanza, Brian McGrath and Serge Kempeneers) and the two Metrolab managers (Sara Cesari and Louise Prouteau). The introduction is followed by a presentation of the four Brussels Ecosystems explored during the Brussels Ecosystems Conference and Masterclass. It was prepared by a larger group of Metrolab researchers also including Marine Declève, Anna Ternon, Chloé Salembier and Stephan Kampelmann.

Following this introduction, the publication presents the design exploration co-produced by thirty researchers with diverse disciplinary and geographical backgrounds (Belgium, Italy, Spain, US, Turkey, France, China, etc.), in close collaboration with key stakeholders from Brussels. The publication closes with critical insights from the researchers at Metrolab and the international experts on the scientific committee (Elena Cogato-Lanza and Brian McGrath). We hope the Designing Brussels Ecosystems MasterClass and this publication are a first step toward building collective knowledge ecology in Brussels Ecosystems.

## Introduction

# Designing Brussels ecosystems

Geoffrey Grulois, Bernard Declève, Roselyne de Lestrage, Corentin Sanchez Trenado and Andrea Bortolotti

### [Brussels Ecosystems: conceptual framework](#)

**In Brussels the concept of urban ecosystem emerged over forty years ago, in the context of ecological studies conducted by the interdisciplinary teams of Paul Duvigneaud. The goal of Duvigneaud's work was to provide a broad perspective of the interdependencies that exist between the human and non-human worlds. While the positivist project of offering a global ecosystem science was eventually abandoned, the ecosystemic approach is today at the heart of research and innovation in a number of areas of natural sciences, social sciences, engineering, design and the humanities.**

Each of them includes the concept of ecosystem in its field of study in order to develop specific methods. Beyond the increasing weight of environmental issues, we suggest that the current ubiquity of the notion of ecosystem is contributing to an epistemological transition where more focus is placed on the interconnectedness of all things (human and non-human). Brussels Ecosystems intends to advance in this direction, experimenting with new interdisciplinary integrative tools for the critical evaluation and support of urban policies and urban projects.

Brussels Ecosystems is centred on a common goal: leveraging various aspects of ecology (natural, social, political and knowledge-building) as a basis for reflection on the interdependence between the components of a city, while taking into account the notions that the world is a finite pool of resources and that humans are an integral part of nature. In this way, Brussels Ecosystems wishes to contribute to forward-looking discussions on the transition of Brussels toward a new socio-environmental and technical regime.

In practice, Brussels Ecosystems included two different events: an international

conference held the 18th and 19th of October 2018, and a MasterClass from 28th of January to 8th of February 2019. While the conference was intended to lay the groundwork the conceptual and methodological framework of Brussels Ecosystems, the MasterClass was a first experiment in its application to urban policies and urban projects in Brussels.

### **A transdisciplinary approach to urban ecosystems**

The conference explored various ways in which the concept of ecosystem can be shaped in order to allow the concepts — which are often metaphorical in nature — and the methods derived from them to come together, thus creating an integrated framework for analysis and forward-looking action.

The conference sought to put the topic of Brussels' ecosystems in a transdisciplinary perspective, by asking, 'What is an urban ecosystem?' The variety of scientific approaches to the interaction between society and environment were leveraged as a resource for knowledge, project and policy support. Which dimensions of urban reality do the various aspects of ecosystems reveal to us? What tools do they provide in the various fields of study involved?