PRACTICING A POLYCENTRIC (POST) METROPOLIS:

A DIALOGUE ABOUT THE MILAN URBAN REGION

Mario Paris in conversation with Alessandro Balducci

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Conversations in Planning: Editorial

'Practicing a Polycentric (Post) Metropolis' is the eighth booklet published as part of the AESOP Young Academics 'Conversation in Planning Theory and Practice' project whose aim is learning through conversations across generations of planners. In a first phase of the project, booklets were divided in three series or themes, such as, the use of philosophical theories in planning, planning theories and planning practices (Exploring place matters in planning practice), being the last one the framework for this booklet. Now, we have combined these series into a sole and comprehensive structure.

From a pedagogical perspective, the uniqueness of the project is learning through conversations. The booklets aim to provide an introduction to the theories and ideas of senior scholars: what and how they contributed to the field of planning; what and who influenced the development of these theories; and how this implicated/reflected on planning debate in theory and/or practice. The young academic authors not only learn from the senior scholars about their work, but also get involved in conversation with them in order to make sense of how the senior scholars have used these theories in their work, and how such theories are applied in planning theory and practice.

This booklet has been conceived as a reflection grounded on the practice of planning in the context of the Milan Urban Region. The dialogue merges the vivid experience of Alessandro Balducci with the sharp questions of Mario Paris discussing the phenomenology of post-metropolis and the governance of polycentric urbanized territories in Lombardy. Corinna Morandi and Willem Salet have offered their comments and enriched the conversation, bringing their perspectives into it. Being Urban Planning a practice-oriented discipline, we think it is important to stress the interdependency between theories and the way they apply in various contexts and places. Also, we think that the direct narrative of planners' experience may open new interesting perspectives for advancing knowledge. In this respect, the extensive interview that is discussed in this booklet - and the reflections built around it - give the reader many insights concerned with an open and plural planning approach in processes of regional urbanization.

We would encourage both the young academic community as well as the senior scholars to use the booklets in their teaching. Being open-access, they can be easily circulated. The Editorial Board is working for improving the dissemination of the booklets through the major publishing circuits.
We extend our heartfelt gratitude to all the senior scholars of present and forthcoming booklets who have not only enthusiastically agreed to take part in the project but have also relentlessly supported our YA authors in spite of their very busy schedule.

With Thanks and Regards
The Conversations in Planning Booklet Team

FOREWORD

In their recent reflections about 'urban age', Brenner and Schmid pointed out the relevance of conceptual abstractions related to the changing form and geography of urbanization processes in twenty-first century debates on urban questions. According to them, "this recursive work of theory, the field of urban studies will be poorly equipped to decipher the nature and implications of the complex, multiscalar transformations they aspire to understand" Brenner and Schmid, 2014, 749.

This booklet proposes an overview of the contributions of Professor Alessandro Balducci (Politecnico di Milano) to the field of urban and regional planning through his unique and multifaceted approach. Summing up his long career, the present research focuses on studies that have focused on the current conditions of European cities and processes of regional urbanization. This publication also offers novel reflections and perspectives, generated through discussion between myself and Prof Balducci, on the results of a recent study I completed on alternative forms of centrality in urbanized territories, which I define as Clusters of Central Functions. The overlay of these two lines of research has produced a rich set of open issues, questions, and contradictions, which Prof Balducci and I explore together. Our dialogue and the accompanying explanatory texts demonstrate the need for an approach to contemporary cities that can produce a new and technically pertinent consciousness of urban phenomena.

To achieve this type of consciousness, which entails more than mere know-how or a set of professional protocols, the planners of today should practice the city from many different points of view. In this respect, Balducci's experience is an interesting case, because he has practiced the city in many different roles: as a scholar, an urban planner, a practitioner, a politician, and as an inhabitant. Focusing on the case study of Milan and its Urban Region, we discover how these different points of view have influenced his approach to current cities and their transformation processes. Sharing experiences and memories, addressing relevant topics in current planning studies debates, and reflecting on concrete places, we explore how the planners of the future can contribute to territorial transformations and needs. This approach has produced a complex text, in which we reflect on key ideas about contemporary urbanized territories through the lens of our personal research interests. As such, this booklet has much to offer to both an academic and a professional audience in the field of urban planning, as well as to the actors and stakeholders in the broader policy community who influence the current transformations of European cities and, therefore, the quality of life of inhabitants. I hope the ideas and reflections offered here will stimulate continuous and dedicated research into creative, innovative, and open-minded approaches to urban phenomena.

Mario Paris

It still seems like yesterday that I joined the AESOP community in 1993 in Lodz, Poland. The formal group of Young Academics, which I undoubtedly was at the time, had not yet been set up. I had just won the national selection to become an associate professor, and so was finally able to go to the AESOP conferences I had been hearing so much about. From the very beginning, my participation in this group was a serious commitment. First, Patsy Healey asked me to coordinate the working group on "planning research". I also participated regularly in the annual appointment of the Conference, often as a track chair, and 2001 I have served first as Senior vice-president and then as President of the Association. By participating in the AESOP activities I have learned a lot, as a researcher, as a teacher, and as a member of a community of people engaged in the common effort to construct a successful interpretation and an effective practice of planning. This is why I gladly accepted the proposal of the Young Academics group to participate in this interesting project, even if that meant facing how much time has passed and the fact that I am now one of the "old academics".

I was immediately interested, not so much in rehashing my life story, but in the opportunity to delve into my research topics, to rediscover my roots in a career of experiences that can never be rigidly divided into watertight compartments: civic activism, my role as a teacher, my work as researcher. Although Mario Paris graduated from our Politecnico, we had never met. He obtained his doctorate in Valladolid, Spain, while I was working in Milan, first as Vice-rector at the Politecnico di Milano and then as Deputy Mayor for Urban Planning for the city. It was therefore very nice for me to discover through this dialogue that we had nevertheless cultivated very close areas of research: I coordinated a series of research projects on the great Italian urban regions, and he did work on the new centralities that were being formed in these same areas. Both of us have been drawn to emerging planning problems: settlement dispersion, enlargement of regional urbanization, the search for new forms of urbanity, and the difficulty in defining new planning strategies for these areas.

For me, this is perhaps a point of arrival; for Mario, a starting point for future research. Indeed, perhaps this is the meaning of the Young Academics project, and I thank them for the opportunity.

Alessandro Balducci

CONTRIBUTORS

Mario Paris is an architect with a PhD in Urban and Regional Planning (Universidad de Valladolid, Spain). He works as a researcher and consultant (Urb&Com Lab, Instituto Universitario de Urbanística). Validated as URBAct ad hoc expert, he currently teaches urban planning at the Politecnico di Milano (Italy).

His field of research focuses on the settlement strategies of service functions in metropolitan areas, with a specific focus on their impacts on local economies, spatial patterns, and territorial vocations. In parallel with his research on Clusters of Central Functions, he has also conducted studies on the production of spatial knowledge to support territorial governance and urban regeneration at metropolitan scale thanks to a research fellowship financed by *Città Metropolitana di Milano*, and on the role of luxury as a driver of urban transformation.

Alessandro Balducci is an architect and holds PhD in Planning. Full Professor of Planning and Urban Policies and a member of the PhD Program in Urban Planning, Design, and Policy in Politecnico di Milano. He has served as President of Urban@it (the National Centre for Urban Policies Studies, 2015-2018), Deputy Mayor for Urban Planning and Agriculture of the City of Milan (2015-2016), Vice-Rector (2010-2015) and Head of the Department of Architecture and Planning (2001-2008) of the Politecnico di Milano, President of AESOP (the Association of European Schools of Planning, 2001-2004), Chair of the Italian Society of Urbanists (SIU 2010-2014), and is one of the founding members of the European Urban Research Association (EURA).

As a scholar of urban studies and planning, he has been responsible for European and national research projects. As an academic planner he has overseen many projects, including the Strategic Plan of the Province of Milan (2004-2008), and has served as an advisor on planning and urban projects in Italy and abroad (Shanghai, Xi'an, Dubai).

Balducci has taught at the Faculty of Architecture of Pescara (1992-1995), spent time as a visiting scholar at U.C. Berkeley (USA), and as a visiting professor at the University of Reims (France), Tongji University (China), Aalto University (Finland), MIT (USA) and at the Accademia di Architettura di Mendrisio, (Switzerland).

He is the author/editor of 20 books and a variety of articles and essays in Italian and English.

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INTRODUCTION

The present booklet reports discussions and reflections with Professor Alessandro Balducci on the potential contributions of planners to challenges posed by current processes of regional urbanization (in terms of governance, inhabitants' quality of life, economic growth, environmental processes for public agendas). Authors reflect on their personal experiences, exploring the practicalities and the societal and physical impacts of their research and work[1].

As an alumnus of the Politecnico di Milano, an Italian planner, a DAStU-PoliMI researcher, an AE-SOP Young Academic, and a member of the *Società Italiana degli Urbanisti*, I have long known the importance of Professor Balducci's work in planning studies, but I had never directly worked with him until this book. I am in a similar position as the reader, seeking to discover more about an important figure of the planning field, to understand the reasons and key ideas that influenced his practice.
In his recent work – especially on the need for innovation in the transformation of current cities (PRIN 2005-2007) and on sustainability, habitability, and governability in emerging urban forms (PRIN 2010-2011) – Professor Balducci has defined original approaches and terminology for working on contemporary cities, focusing particularly on the Italian context and, especially, on Milan Urban Region.

During three long interviews[2], I had the chance to discuss these issues with Professor Balducci, and to situate them within current disciplinary discourse, with reference to his publications. In these dialogues, he shares memories, experiences, and anecdotes that allow the reader to appreciate how his role as both a planner (scholar, practitioner and policy maker) and an inhabitant allowed him to practice the city in many different ways. Yet the focus of the book is not biographic or self-referential. These dialogues explore the richness of Balducci's experience to first help readers understand his area of focus, and then explore how he contributed in the comprehension and transformation of a specific territory. His example shows how planners interact with territorial needs and re-framing disciplinary knowledge, contributed to future developments of places.

The Milan Urban Region (MUR) is used here as a case study to explore characteristics of post-metropolitan territories and a local declination of regional dynamics of urbanization, their socio-economic, regulatory, institutional, and governance impacts. According to Mela (2005, pp. 8-9), to understand contemporary processes of urbanization, one must focus on the phenomenology of practices, their complex spatial and temporal geographies, their interrelatedness and continuous dynamics, their unpredictability, but also the routine character into which they are channeled, due also to the technology and organizational forms that make the ordinary functioning of the city possible.

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[1] Although this booklet should be considered a result of the common work and reflection of the two authors, M. Paris took primary responsibility for those texts that present, interact and follow the dialogue, the introduction and textboxes.

[2] Interviews took places at the Politecnico di Milano on July, 21st; August, 23rd, and September 27th, 2017.

This booklet follows a similar slant, setting aside the task of defining contemporary cities and drawing on recent literature (Ch. 1), the cultural context and existing approaches to European cities are explored with a focus on the descriptions of urbanized territories that effectively move beyond the consolidated antitheses (Ch. 2). The booklet then concentrates on the polycentric pattern of urban regions, exploring alternative forms of centrality and the specific urbanity that marks these environments (Ch. 3). On this basis, we propose a specific study of a set of spaces, defined as Clusters of Central Functions (CCFs), and their multi-dimensional impacts in the Lombardy Region (Ch. 4). In the conclusions (Ch. 5), the discussion moves to the governance of polycentric urbanized territories and the implications of alternative forms of centrality for public agendas.

A transversal topic is also addressed, namely the contributions that planners make when they generate innovative descriptions of current cities, thereby producing new knowledge of the space, supporting the actions of public actors, and contributing to policy-making processes. The encounter between two authors enriches this framework, producing a detailed reflection on a concrete space (the MUR) and its current status. In this light, the empirical observations produce a double result: first, they allow us to bring the interpretative tools and critical visions of foreign scholars into the study of the only Italian city that currently exhibits the specific features of the post-metropolis as defined by E.W. Soja. Second, based on the empirical observation of this case study, we can identify new ideas, suggestions, and contradictions. These reflections also integrate the current disciplinary approach to regional urbanization, in a dynamic context that has only recently achieved an international audience.

We discuss several aspects of the governance of polycentric urbanized territories, to contribute to the discourse on contemporary cities in a relevant and technically pertinent way (Secchi, 2000; Benevolo 1990). This depends on the practical dimension of our approach, which reflects the work of Balducci, in which actions, policies, and strategies aim to be replicable, exportable, and sensitive (to socio-economic conditions, the features of places and its *genius loci*). The booklet explains this approach, proposing an open set of ideas that, hopefully, will help planners (scholars, practitioners, policy makers) politicians and inhabitants of the urbanized territories to be more conscious of the space in which they live in and which is influenced by their actions.

1. PRACTICING THE CITY

We have always tried to adopt a reflective approach (Schön, 1983; Balducci & Bertolini, 2007), linking situated practical experience to academic reflection, interrogating our own frames of reference, revising our perspective and actions on the basis of observing actual outcomes, and constantly questioning our method. (Albrechts & Balducci, 2013, p. 24)

In the article quoted above, Balducci underlines how his approach is rooted in the "practical" dimension of planning actions, and how this involves a set of different meanings, implications, and opportunities. As such, the present chapter explores the idea of "practice" as a learning and reflecting process in planning and how this impacts Balducci's approach. A review of his background and recent work reveals the experiences, references, and influences that have shaped his multifaceted perspective. During our interviews, he reflected on the interaction of the four main roles (inhabitant, planner, academic, and policy maker) that he has assumed in the course of his career, often at the same time. What links these roles is his consistently personal approach, honed while studying, managing, and practicing in the field of planning. In this phase, rather than contributing my own perspective to the dialogue, I sought mainly to draw out Balducci's reflections on his personal and professional path, focusing on specific experiences and asking for critical assessments of key topics.

Framing and re-framing his assumptions, through answers, anecdotes, and digressions, Balducci explains how these experiences have impacted his work. Finally, he concentrates on specific contributions produced for the Italian context and, especially, for the Milan Urban Region. The following pages summarize Balducci's long and complex relationship with this city, at different scales. This rich succession of experiences represents a key factor in the definition of his personal point of view on contemporary urban phenomena and recent transformations of European cities.

1.1 PRACTICE AS A SEMANTIC FIELD IN PLANNING

In the article "The universal and the contingent", Healey (2012, p. 196) reflects on the legitimacy of attempts aimed at reconfiguring practices. She focuses on concepts and ideas elaborated for specific contexts and their re-use in other parts of the world. This leads to an awareness of the opportunities and risks entailed in using practices as a source of knowledge and, at the same time, a tool with which to reflect on one's field of study, research, and work.

"Practice" is a fuzzy term that involves a rich and articulated semantic field. It affects the application of protocols and the carrying out of activities; it includes a hint of performative behaviours and – sometimes – the idea of the repetition.

Practicing also means doing something customarily, frequently and, as such, becoming able to develop specific tasks. According to Schön (1983, pp. 8-9), it is through practice that a person acquires the capacity to cope with unique, uncertain, and contentious situations. For this reason, the practitioner – the person who practices – often reveals a capacity to reflect on their intuitive knowledge by doing.

> **W**hen a practitioner reflects in and on his practice, the possible objects of his reflection are as varied as the kinds of phenomena before him and the systems of knowing-in-practice that he brings to them. He may reflect on the tacit norms and appreciations that underlie a judgment, or on the strategies and theories implicit in a pattern of behaviour. He may reflect on the feeling for a situation that has led him to adopt a particular course of action, on the way in which he has framed the problem he is trying to solve, or on the role he has constructed for himself within a larger institutional context.
> (Schön, 1983, p. 62)

In keeping with this view, and as explained in the following pages, Balducci has 'practiced the city' in many different roles, thereby acquiring a specific and multifaceted perspective on its nature and transformations. But his action is more than a set of pragmatic operations, based on mere fact or practical considerations that exclude intellectual or theoretical matters (Bernstein, 2010). The material dimension of problems and challenges is a driver that feeds his reflection on the evolution of urban systems and their change of status (Indovina, 1990).

On a multifaceted profile

MP: I would like to begin this conversation by discussing your personal perception of your work and the phases that have marked – and shaped – your viewpoint.

AB: I think one of the distinctive traits of my approach is the convergence of my experiences, my work, my studies, and my exchanges. I've never made great leaps forward, preferring instead to progress step-by-step, continuously advancing without interruption.

MP: What have been the key experiences/influences in your education?

AB: My university studies took place during turbulent years ('73-'78), first at the Politecnico di Torino where I met Professor Luigi Mazza, one of the key figures in planning theory, who hired me to work at his research centre, which attracted me to urban planning. Then I moved to the Politecnico di Milano where I studied under professors Bernardo Secchi, Paolo Ceccarelli, and in particular Pier Luigi Crosta who, while I was still a student, invited me to work on his research team. Since then he has been one of my personal references. He is a peculiar kind of planner. When I met him, after a stay in U.S., he had just published *L'urbanistica del riformismo: USA 1890-1940*[3] and a translation of Hirschman's 1968 book, *Development Projects Observed*[4].

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[3] Crosta, P.L. et al. (eds.) (1975) *L'urbanistica del riformismo: USA 1890-1940*. Milan, I: Mazzotta.
[4] Edited in Italian as: Hirschman, A.O. (1975) *I progetti di sviluppo: un'analisi critica di progetti realizzati nel Meridione e in paesi del Terzo mondo.* Milan, I: Franco Angeli (Transl. P.L. Crosta).

During my MS thesis in architecture, I worked on large-scale urban transformations of Milan. Supervised by Crosta, this work represented for me a first approach to the decentralization of certain functions: high-income housing projects (such as Milano 2, Milano 3, Milano San Felice), retail and entertainment aggregates (Assago, Carugate, etc.).

At the same time, I was involved as volunteer in a disadvantaged neighbourhood in Milan. At 22, I became a consigliere (*councillor*) of my municipality, with a movement (the *Movimento assembleare Certosa*) aimed at introducing participation processes within local governance. I spent four years in this role, and for me it was an opportunity for advanced training: I worked on the issue of participatory engagement, involving several ideas I developed working with Crosta, rooted in the principles of advocacy planning. I also published a short book[5] in which I reflected about the opportunities related to participation within planning regulation schemes.

MP: What are the lessons learned from these years?

AB: Thanks to these experiences, I developed my personal point of view on policy analysis and on conflict in planning. Within the group I used to work with, we considered conflicts as opportunities, and we thought that the involvement of a rich set of actors within spatial planning issues represented a resource and not an obstacle. At that time, this point represented an innovative approach in urban studies, far from the mainstream. In parallel, I discovered a field of interest that considers both existing planning techniques and transformations that challenge plans and planning tools. My focus was how to deal with decision-making processes, disrupt existing practices, and involve participation within consolidated practices. This approach should allow one to address relevant issues in spatial planning.

MP: And after University?

AB: Having concluded my MS in architecture, I collaborated with the Research Division (*Ufficio Studi*) of the CISL[6] of Milan during and after my civil service (as a conscientious objector to military service), working on territorial issues and, especially, on housing problems. After that, I worked at Politecnico di Milano as a tutor/TA and with the Municipality of Milan as junior urban planner on the revision of the General Urban Development Plan (*Piano Regolatore Generale*) of the city, with a focus on Gallaratese neighbourhood.

I also took part in two housing projects as a designer. Although I did not feel entirely comfortable in that role, I think this activity showed me a different aspect of the process of production of the city. This led to me starting a PhD during which I focused on my interest in participation and policy analysis, and how they can be linked with an approach in which planning is a process.

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[5] Balducci, A. (1980) *Enti locali e territorio. Le competenze dei Comuni in materia urbanistica*, Quaderni di intervento nelle autonomie locali. 1, supplement to "Incontro ACLI", n° 1-3.
[6] Acr. *Confederazione Italiana Sindacati Lavoratori.*

In my PhD thesis, published as book entitled *Disegnare il futuro*[7], I reflected on planning as policy design process. During that research, I improved my systematic awareness of this issue, expanding beyond a fragmented knowledge of the field of planning, and am grateful to Bruno Dente and Gloria Regonini for their suggestions regarding research and studies on public policy in general. In the first part of the thesis, I reflect on the notion of "effectiveness" in this field. In the second, drafted during my stay at the University of California, Berkeley as a visiting scholar, I explored planning theories and focused on the factors that challenge the efficacy of planning practices from different points of view. At UC Berkeley I had the chance to work on and discuss my hypothesis with some of the most distinguished scholars in the field. The third and final part of my dissertation was dedicated to the case-study of the Gallaratese neighbourhood, where I had had the opportunity to work as a planner and where I tested my approach.

MP: Once you concluded your PhD, did you focus on your academic career or have you been working in professional practice?

AB: In 1990, I collaborated with IRS[8] in Milan. Together with Bruno Dente, Paolo Fareri and other colleagues, we established a think tank to support local administrations using participatory planning processes. That was a very uncertain time due to the political crisis and the clash of cooperation among public bodies and consolidated consultants in connection with the *Mani Pulite* investigation[9]. We were outsiders. These pioneering experiences based on participatory design and the involvement of local communities took place in various cities, like Vicenza and Pesaro (where the general planning scheme was developed by Bernardo Secchi) in the Emilia-Romagna Region (i.e. Correggio), and in many other small and medium municipalities (Melegnano, Novate Milanese, etc.) interested in innovating their approach to urban planning. Structured experiences started with the time of the *Contratti di quartiere* (Neighbourhood Contracts)[10] when local administrations were forced to introduce specific actions related to participation and community involvement into urban regeneration projects. In those years, I tried to put into practice the 'reunion' that I have been practicing since my first political experiences with participation and public actions. In a way, these experiences have been for me the *trait d'union* between strategic planning and the metropolitan/post-metropolitan scale.

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[7] Balducci, A. (1991) *Disegnare il futuro: Il problema dell'efficacia nella pianificazione urbanistica.* Bologna, I: Il Mulino.
[8] Acronym for Istituto per la Ricerca Sociale (Institute for Social Research). For more info visit: https://www.irsonline.it/en
[9] Mani Pulite ("Clean Hands") is the name of the nationwide judicial investigation into political corruption in Italy that occurred in '92-'93. It involved a large number of politicians from local and national administration as well as mangers of the private sector.
[10] Contratti di quartiere were part of two action programs developed by the Ministero delle Infrastrutture e dei Trasporti in 1998 and 2002 (and re-launched in 2014) related to urban regeneration. Those actions were to be located in deprived neighbourhoods marked by a poor quality of the built environment and public spaces, lack of services, and limited social cohesion.

MP: This summary shows that during these years, you identified a specific approach to planning, marked by a personal interest for the 'policy dimension'.

AB: I think that was due to a combination of factors that affected both the personal and environmental dimension. In 1992, I won a position as Associate Professor at the *Università degli Studi G. D'Annunzio di Chieti-Pescara*, where I spent 4 years. Meanwhile, I maintained a relationship with the IRS, thanks to which I developed several collaborations regarding strategic planning experiences, which had a direct link with participatory planning, and that was part of my research. In Italy, such issues weren't mainstream, so I had to look to international sources about it. As soon as I had a steady position at the university I immediately attended my first AESOP Conference in Lodz, in 1993, and Patsy Healey invited me to join the Planning Research Group, which she chaired. In 1994, when she became Aesop President, she asked me to take her position as responsible of the Planning research group. A great opportunity for me to get in contact not only with her but also with a number of scholars like Louis Albrechts, Klaus Kunzmann, who helped me a lot in developing my research interests.

After 1995 a new player came to the fore in Italy, the *Agenzie di sviluppo territoriale* (Consortiums/ Agencies for territorial development). They were a sort of innovation-driver for planning, sometimes even unintentionally, because they introduced in the Italian context issues related to the strategic approach to regional governance. In this period, I came back to Milan as an Associate Professor at the Politecnico, and I collaborated on several projects with these agencies, and especially for the *Agenzia di Sviluppo Nord-Milano* (see 1.3). Thanks to those projects, I had the opportunity to explore the relationships between complex urban programs and the strategic approach, and how they in turn impact spatial governance. Progressively, these issues became a central topic of my research, and I have been working on them in many ways for a long time.

Several years later, strategic planning and the processual approach become one of the core issues within disciplinary debates in Italy. In this process, a series of conferences that enriched the discussion about the status of Italian cities and regions was hosted by the DIAP[11] of Politecnico di Milano, where I was Department Head between 2001 and 2008. It was during this period that I was elected Senior Vice President and then President of AESOP, which helped me a lot in establishing an international dialogue on these themes. One of the most interesting initiatives that I undertook in that period was the 2004 department conference "*Milano dopo la metropoli*" (Milan after the Metropolis), which explored the limits of the view of Milan as a "metropolis". As a result, between 2004-2009 I was invited to coordinate the strategic plan of the Province of Milan, called "*Città di città*" (City of cities). This plan represented a sort of testing ground for my approach. After the conclusion of my experience as Department Head, I was nominated Senior Vice Rector of Politecnico di Milano, and remained engaged in the university government for five years (2010-2015). During this period, I continued to focus on research topics through research programs and tenders for funding – including two important PRIN projects (see 2.1), funded by the Italian government.

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[11] Former *Dipartimento di Architettura e Pianificazione (DIAP),* today *Dipartimento di Architettura e Studi Urbani* (DAStU) at the Politecnico di Milano.

MP: But recently you've also had another kind of experience, namely in the political sphere. How has this been influenced by your knowledge of the city and its post-metropolitan condition?

AB: I accepted the offer to serve as Deputy Mayor delegated to urban planning and agriculture of Milan for two main reasons. First, my esteem for Mayor Giuliano Pisapia[12]; second, the curiosity that stemmed from my background in urban and territorial planning – and in the end I knew that it was for a limited period[13]. At the time, other colleagues like Patrizia Gabellini and Angela Barbarente, had already gained experience with direct government. For me, it represented yet another point of view on the processes of governance and another opportunity to practice the city.

MP: What are your next challenges?

AB: After my political experience, I returned to academic tasks, and I am currently involved in several fields at different scales. I was engaged by the Presidency of the Council of Ministers in an extension of my most recent research on post-metropolitan regions, where we collaborated with the DIPE[14] to extract policy indicators from data mapped on an atlas that we produced (www.postmetropoli.it). I am also collaborating on the project *Casa Italia*, a task force established by the Italian Prime Minister to prepare a sort of long-term strategic plan for seismic areas in Italy. Through that project, I also became involved in the Special Governmental Commission for Earthquake Reconstruction 2016. In Milan I am also coordinating the definition of a vision for the Città Studi area, in conjunction with the relocation of a portion of the *Università Statale* to the new campus at the former EXPO site. In undertaking these tasks, I try to bring to bear the set of competences I acquired in the past, focusing on the strategic aspects of planning, interacting with the different actors involved and considering the conditions and processes of current transformations as important to the final results. I am also working on a continuation of my research on the post-metropolis, focusing on the implications of this idea within the field of regional governance. More in general, I would like to take time to reflect and study, and to come back to several ideas I have been developing in recent years.

[12] Mayor of Milan between 2011 and 2016.
[13] A. Balducci replaced in 2015 the former Councillor A.L. De Cesaris, until the end of the legislature (in 2016).
[14] *The Dipartimento per la Programmazione e il coordinamento della politica Economica* (DIPE) supports the Italian Government in the field of regional policies and actions, with technical expertise and technological infrastructure.

1.2   A COHERENT APPROACH

As Balducci points out in this part of the interview, the link between his experiences as planner, researcher, and policy maker is the continuity of his interest in political and strategic aspects of planning in both theoretical and operational tasks. He defines these convergences as "alignments", an image that describes his desire to address complexity and arranging dynamic balances. This coherence represents a strong base for his action, proposing a specific focus on the involvement of actors' networks, needs, and positions as a planning tool. Through this approach, he has practiced the city and he has been asked to directly develop – or to support the development of – many plans and actions at different scales. Working with credibility, commitment, confidence, and competence, four interdependent variables noted by Schön (1983, p. 261), he has developed a strong network of experts, scholars, politicians, and civil servants who have collaborated in many ways. At the same time, through his various roles and experiences, he has reinforced his own background, strengthening this peculiar feature of his profile.

Learning from practice (and reflecting about it)

MP: Within your personal path, have you ever had discontinuities? And do you think that in the future you will be able to overcome any incongruities?

AB: I don't know whether my path has been linear or whether this explanation depends on my personal ex-post view. Like everybody, I have had to deal with opportunities and address constraints over time, but looking back I have the feeling that I followed a path, where my interest in the social, political and strategic factors of planning were the key. I could have tried other options: I always worked within a policy approach to planning, which for me was lacking in the Italian planning tradition, but rather than explore other fields, I tried to cooperate with experts in urban design and with other approaches when it was important, such as with the General Urban Development Plan for Seregno, or working on the Urban General Plan of Casalpusterlengo. All my experiences have been conducted within the University, mixing practice, academic exploration and applied research.

This has been at the basis of my movement from strategic planning to the study of the urban region: I realized that it would have been impossible to be effective in planning without producing a new representation of the changing urban condition and of the new emerging urban questions. In this I had the privilege of working with a fantastic group of colleagues and in a Department with the most brilliant scholars in the field of planning.

The main discontinuities have probably been in my roles, not in my approach: I had many different positions before and after I became Associate Professor in '92, at 38. I have worked in the university context as both a teacher and researcher, and in several institutional roles, I have visited several different planning schools, and have also been involved in politics.

MP: Within all these experiences, I think that another variable has been your geographic and cultural context, and the consequent enrichment of your background. In my opinion, your familiarity with ideas and practices that belong to non-Italian cultures and approaches to planning represents one of the most unique aspects of your profile.

AB: During my PhD, I spent a semester in Berkeley at the University of California. There, I had the opportunity to interact with Manuel Castells, Karen Christensen, Judith Innes and other distinguished scholars who were based at the Department. It was a dynamic environment, full of interesting seminars. When I was there, I took advantage of meeting Aaron Wildavsky and Eugene Bardach and of many talks with Peter Hall and Melvin Webber, and I drafted the planning theory section of my thesis, acquiring a new awareness of the link between participation and processual approach as key elements for spatial planning.

Despite the attention dedicated to this issue abroad (especially in the US and the UK), in Italy it has long remained of secondary importance. For this reason, I have always attended AESOP[15] conferences in order to have the opportunity to share these research interests with a larger community. I always considered it a relevant space to share the results of my work. This international projection led me to participate in and then chair the Planning Research Commission of the Association, of which I was then elected president. I was also one of the founding members of the European Urban Research Association (EURA), established in 1997, and collaborated to establish the Italian Urban Planners Society (*Società Italiana Urbanisti*)[16] together with Pier Carlo Palermo and Alberto Clementi and other colleagues, a society which I then chaired in 2010-2014.

During my term as Executive Vice Rector (2010-2015), amongst other duties, I was delegate by the Rector for International relationships of the Politecnico di Milano, due to my past experiences. I have taught as a Visiting Professor at several universities: the *Université de Reims Champagne-Ardenne* (France, 2005), Aalto University (Finland, 2009), MIT (U.S., 2009), Tongji University (China, 2009-2010) and the *Accademia di Architettura di Mendrisio*, at the *Università della Svizzera Italiana* (Switzerland, 2009-2016).

With a task force from the Department, I suggested a set of guidelines for the project "Rainbow city" for the Hongku neighbourhood in Shanghai (China) and we produced a Development Regulation Framework proposal for the city of Abu Dhabi (UAE). Later, I was invited to participate as an expert in the evaluation of Urban Master Plan of Dubai (UAE). In these contexts, far away from those I was I used to, I sought to apply my knowledge of strategic planning and actor involvement.

These international experiences, and the involvement in the strategic planning in the Milanese urban region, allowed me to realize that there was a lack of studies in Italy on the transformation of cities and the regional dimension of contemporary urbanism. These topics, addressed also in the works of Klaus Kunzman, Edward Soja and Neil Brenner, are central to the international debate. For this reason, I have tried to understand the similarities and differences of the Italian case.

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[15] Association of the European Schools of Planning. For more info: http://www.aesop-planning.eu/
[16] Or SIU. For more info: http://siu.bedita.net/home

At the same time, I have applied consolidated ideas shared by the international scientific community (post-metropolis concept, inter-municipal cooperation, etc.) as a tool to contribute to recent reforms of Italian institutional patterns. Looking back, my work in the Italian context has also relied on several ideas and approaches already recognized abroad. At times, I have also tried to show the Italian position within the international debate[17].

MP: You have acquired a set of rich and varied experiences within the city. Which role (academic, planner, politician, inhabitant) has most influenced your research interests within the field of urban and regional planning?

AB: Rather than focusing on one specific role, I think it's the integration of all of them and experiencing the city from many different points of view that's important. I have designed buildings in Milan, I've researched Milan, I've pushed for participatory processes in Milan, and I've studied the transformations of Milan from different points of view. Living and working, discussing and re-thinking, moving and designing the city are all ways to have contact with its spatial condition, its reality. Therefore, practicing the city is a way to learn, and it is needed if you want to work wisely within the spatial planning field.

During all these years and engaging in all these practices, I have also had the opportunity to come back to theoretical research, writing and reflecting on planning as a field. I like reading, studying, and teaching and have written several books and articles about my experiences, focusing on specific contexts or contributing to planning theory. Two of the most important are the books *Strategic Planning for contemporary urban regions*[18], in which the *Città di città* plan for the province of Milan was used as a basis to reflect on strategic planning; and *Urban Planning as a trading zone*[19] in which the concept introduced by Peter Galison (1997) is used to reflect on the local interactions of different sub-cultures and their influences on planning.

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[17] This is also clear in certain publications related to post-metropolitan territories. Edited by A. Balducci with V. Fedeli and F. Curci (2017a; 2017b), they were generated by the PRIN (2011-2014). The earliest, *Oltre la metropoli. L'urbanizzazione regionale in Italia* and *Metabolismo e regionalizzazione dell'urbano* focus on a specific analysis of Italian urban systems, in which different patterns and articulated differences emerge. They are reflections on the atlas and the Milan Urban Region cases and pushed several different Italian research groups to reflect on peculiarities and potential of that specific context. Another article, "Post-metropolitan territories: Looking for a new urbanity" links these new forms of urbanization to their impacts in terms of governance and quality of life, exploring the relationship of this theme with international debates about sustainability, processes of de-industrialization, and changes to territorialities (Balducci & al., 2017c).
[18] Balducci, A., Fedeli, V. & Pasqui, G. (eds.) (2011) *Strategic planning for contemporary urban regions. City of cities: a project for Milan.* Farnham, UK: Asghate.
[19] Balducci, A, Mäntysalo, R. (eds) (2013) *Urban planning as a trading zone.* Dordrecht, NL: Springer.

MP: A common theme in these experiences seems to be that you have been able to take a clear focus and draw from it two principal outputs: on one hand, you extract ideas, concepts and approaches that became elements of national and international debates about specific issues; on the other hand, you propose reflections that transcend specificities and local constraints, and contribute to planning theory. So, are these practices a testing-ground in which you elaborate raw materials for your theoretical explorations?

AB: As I mentioned, I have spent my career within the University, avoiding private professional work. I am convinced that the exploration of practical dimensions done within the University can be a relevant area that feeds our field of study. I also think that academia should play an important role in the field, with a strong influence on innovative practices and applied protocols. In 2007, together with Luca Bertolini, I wrote an article entitled "Reflecting on practice or reflecting with practice?" in which we discussed the importance of this role that the University can play, starting with the original framework proposed by Andreas Faludi (1989). Faludi distinguished "reflection on practices", i.e. the work of authors who are disconnected from direct exercise of planning and often developed by other experts (common in the U.S.), and "reflection in practices", i.e. the views developed by planners that challenge real experiences of governance and planning. In response, we proposed a third option, a reflection with practice, such as the work done in academia, in which theoretical and applied research contribute to the development of alternative forms of spatial planning.

The practice of the city and its different aspects is a way to respond to the urgent need identified by Charlton (2007, p. 386) for a "much closer cross-pollination between practice, documenting of practice, and theorizing within and in-between contexts". According to Schein (1973, p. 24), the everyday activities of a professional practitioner/consultant rely on the skills and attitude component that concerns the actual performance of services for the client, using underlying basic and applied knowledge. Therefore, "practitioners in planning are frequently embroiled in conflicts of values, goals, purposes and interests" (Schön, 1983, p. 17), with a strong emphasis on problem solving. The involvement of academics in practice represents a valuable condition for progress in this field, especially where research and experimentation are needed as support for planners' actions. At the same time, the involvement of academics in the development of planning actions allows for the positioning of practical experience alongside concurrent research activities linked to national and European programs regarding metropolitan change (Balducci & Bertolini, 2007, p. 534). One key factor can be the involvement of a specific space – the "context" recalled by Charlton above – that academics and practitioners can use as a testing ground for their actions. The following section will focus on the example of the Milan Urban Region and on how the interaction with this specific environment has been a useful and fertile field for Balducci in his innovative actions in the field of planning.

1.3 WHY MILAN?

Within national and international context, Milan represents a case study for the relevance and the dimension of transformations that occur in the city and its metropolitan areas. In recent decades this area has become a testing ground to explore new interpretations and their effectiveness in understanding the dynamics and processes related to the regionalization of urban phenomena. At the same time, according to Bolocan Goldstein (2018, p. 37), describing Milan with international standard paradigms (like "world city", "metropolitan region", "global city", "global city-region", etc.) is a difficult task due to incoherence between its administrative-institutional architecture and its spatial, hierarchical and functional pattern.

Therefore, Milan is radically different from a traditional consolidated city and from a metropolis, understood as system in which a central core produces a sprawled periphery composed by housing compounds, enclaves, and functions expelled from the centre (Balducci, 2004a, p. 9). For this reason, unpacking the territorial nature of the city represent a challenge for current planning tools and urban studies concepts, and necessitate an exploration of innovative references that can support the study of contemporary urban spaces.

Defining the regional portrait of Milan, Balducci et al. (2017e, p. 27) note that this urban region "has been the focus of research explorations concerning regional urbanization processes since the 1960s", and that its specific condition "allows researchers to use the case to test some of the gradient hypotheses on which the conceptualization of the post-metropolis is based".

Since '70s, the presence of the city and its socio-economic impacts has been the driver of significant changes for an area that exceed the institutional borders of the municipality and even the province of Milan[20]. Architects, planners, geographers, economists, and sociologists have produced many different interpretations of this original urban pattern (amongst others: De Carlo, 1962; Crosta & Graziosi, 1977; Lanzani, 1991 and 2012a; Boeri et al., 1993; Clementi et al., 1996; Macchi Cassia & Ischia, 1999; Secchi, 2005; Balducci & Fedeli, 2007; Bolocan Goldstein & Bonfantini, 2007; Balducci et al., 2008 and 2011). Following the processes of contemporary implosion and explosion described by Brenner (2014), the growth of the city influenced several municipalities. The dimension of the urban system interacting with their consolidated spatial, functional, and hierarchical patterns produced dynamics that cannot be defined only as "metropolitan" (see Ch. 2 and 3).

Therefore, the Milan Urban Region (see Textbox 1) is still not a clearly defined area in terms of institutional recognition or administrative boundaries, but this concept can be useful to describe highly urbanized, city-region areas that are characterized by a high population density as well as a concentration of economic, political and cultural activities (Knieling, 2014, p. 9).

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[20] Due to this process, also occurring in other urban areas in Italy, in 2001 was introduced in the Italian Constitution the figure of the "*Città Metropolitana*" that in a set of cases (see Ch. 5) after a national reform in 2014 (L. 56/2014) substituted the *provincia* as institutional body.

Milan and its broader urban system play a pivotal role in one of the most important continental macro regions (Bolocan Goldstein & Puttilli, 2011; Perulli & Pichierri, 2010), which involves all of Northern Italy, from Turin and Geneva to Venice and Bologna, and embraces the Po Valley. Sprawled in 9 Provinces (Varese, Como, Lecco, Bergamo, Lodi, Pavia, Piacenza and Novara) over 3 regions (Lombardy, Emila-Romagna and Pindemont), in MUR they live more than 8 million inhabitants[21] and this space represents an interesting spatial and social laboratory (Bolocan Goldstein, 2016, p. 15).

The socio-economic profile of the city, as well as its role as a node (Balducci 2005; Magatti, 2005) for multiscalar flows and as a hub for functional relationships (Bolocan Goldstein, 2018, p. 37) characterizes the entire Urban Region, representing an unicum in the national and regional context.

Textbox 1: Milan Urban Region (MUR)

In his 1991 book *Il territorio al plurale*, Lanzani explored the relationship between economy and territory, focusing on the Lombardy region and its specific features. He reflected on the limits of consolidated approaches to spatial analysis and pointed out the need to re-think the metropolitan dimension in order to manage the rich diversity of a space fragmented along many different institutional borders. The third chapter of the book focuses on the environmental framework for the central strip of the region (*fascia pedemontana*), also described by Dalmasso (1971) as the *regione urbana lombardo-milanese*. In that area, a clear distinction between urban and rural space, interiors and exteriors was untenable. Lanzani described the reticular configuration of this area as a "new integrated settlement unit" that contained a set of "a series of unique settlement environments that emerge prompted by specific economic and social pressures and by certain living practices, but also a series of images that these spaces represent for local people" (Lanzani, 1991, p. 140). He pointed out the risks entailed by the homogenisation of this area as an aggregate of urbanized enclaves, namely that it could lead to an oversimplification of the physical-spatial complexity of this mix of settlements, which contained a distinctive and peculiar unity in its diversity. The description of this "combination of local conditions and settlement principles that together achieve a stable configuration, although it exhibits internal conflicts and tensions" (Lanzani, 1991, p. 141), is a challenge that requires a sensitive approach to the territorial issues related to socio-economic, demographic, and spatial dimensions. In a more recent article, Del Fabbro (2017) offers different conceptualizations of this area and of the difference between institutional borders and the real dimensions of the Milan urban area.

The first step in a reunion between reality and representation could be to overcome the hierarchical view that would impose the role of central city on the whole area. From the taxonomic point of view, the book adopts the expression the "Milan Urban Region" (hereinafter also MUR) in reference to the area in order to both avoid institutional homonyms and maintain a required indeterminacy.

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[21] More info about the OECD report available at: http://www.keepeek.com/Digital-Asset-Management/oecd/urban-rural-and-regional-development/oecd-territorial-reviews-milan-italy-2006_9789264028920-en#.WgHgJ4_WxRA#page34

Despite the many studies dedicated to the no-longer metropolitan condition (OECD, 2006) of Province of Milan, its metropolitan city and the Lombardy region, there is no clear or institutional limit that identifies the Milan Urban Region. The complexity of the phenomena and dynamics of post-metropolitan development, their variable scales, and their asymmetrical impacts make it difficult to define a single perimeter. For this reason, in the present book the MUR is understood as the aggregate of areas that, together with municipality of Milan, are influenced by urban processes and relationships, even though they don't belong to the institutional *Città Metropolitana* (Metropolitan Authority) of Milan (Bozzuto, 2011, p. 170).

Therefore, a useful artifice for defining the scale of the Milan Urban Region is to work based on differences. According to Benzi (2016) who analysed 2011 census data (ISTAT, 2001 and 2011), demographic indicators and labour market performance are the key factors that mark the spatial dimension of the Milan Urban Region and make it different from the rest of Italy.

TABLE 1: A STATISTICAL APPROACH TO MUR

Variable	MUR	Italy
Population density (Inhab./km2)	553.89	196.75
Concentration of families (Families/km2)	239.16	81.48
Average household size (people)	2.32	2.41
Labour force (% on the whole population)	47.13%	43.72%
Population growth in 2011-2011 (people)	+ 6.88%	-
Population growth in 2011-2011 (households)	+ 13.29%	-
Employment rate (%)	43.80%	38.73%
Inactivity rate[22] (%)	38.78%	42.72%
Number of business and companies (number/100 people)	9.8	8.96
Employees for company	4.26	3.80
Employed in Industry (% of work force)	12.94%	9.97%
Employed in Retail (% of work force)	6.87%	5.95%
Employed in Services (% of work force)	21.89%	18.13%
Occupied in 2007-2017 (%)	+ 8.45%	+ 9.64%
Work force in 2007-2017 (%)	+ 9.39%	+ 9.45%
Unemployment in 2007-2017 (%)	+ 1.29%	- 0.11%

Source: Benzi (2016, p. 13) and elaboration of Paris; Data: ISTAT

[22] According to OECD, the inactivity rate is the proportion of the population that is not in the labour force.

The Milan Urban Region plays a significant role in the Italian economy, although between 2001 and 2011 certain differences have decreased. According to Benzi (2016, p. 13), this model is "still sustainable from an economic point of view". Indeed, he points out that the urban region shows several potential contradictions.

According to the table, the image of Milan is at the same time similar to and different from the city marked by a transformative "urban renaissance" proposed by Galbraith (2007). Similar, because the city still shows a strong dynamism, where the urban economy is still plural and highly versatile, where innovations in social and economic areas play a significant role, and where civil society integrates and interacts with a weak regulatory governance (Bolocan Goldstein et al., 2007, pp. 9-10). Different, because during the last ten years many of the building sites that marked the transformation of Milan into a post-industrial city (Cucca & Ranci, 2017) have been completed. This process marks a different phase of the urban and historical development of the MUR, based on a complex, sometimes even contradictory, metropolitan agenda that should encompass the challenges it poses as an unfinished global city-region (Scott, 2001) composed of several different and heterogeneous local identities.

Working on a threshold

MP: How did you get started working on the Milan Urban Region?

AB: In my MS thesis in Architecture[23], I worked on the forms of development in the Milan Area, focusing on large urban transformations (such as Milano 2, Assago, San Felice, ENI at San Donato). That research showed how Milan had been affected by an early process of metropolisation, a progressive integration of peripheral areas that began in the '70s. In the '90s, with the urban research unit of the IRS, I developed a set of projects regarding participation and the involvement of local communities in San Donato Milanese (southeast Milan) and other small and medium municipalities in its peripheral area. Between '98 and '01, the period of the *Contratti di quartiere*[24], I was involved in one such contract in the Cinisello Balsamo municipality for the regeneration of the S. Eusebio neighbourhood (northeast)[25]. This was a long and interesting experience, and it achieved one of the most positive results of this kind of programs in Italy. The project area was a disordered and neglected neighbourhood (close to the northern administrative boundary), constructed during the '70s due to increased immigration from Southern Italy. The Municipality originally proposed a top-down action aimed at regenerating the public housing stock, based on the relocation of all existing inhabitants (288 dwellings). The local community reacted, and I was approached by the Mayor (Daniela Gasparini) for an alternative proposal based on a participatory approach. During the following two years, we worked with inhabitants, re-formulating the initial proposal, and ultimately only the inhabitants who accepted to do so were moved, while the needs and ideas from remaining population were taken into consideration in the design of public services.

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[23] MS Thesis: Modello di urbanizzazione dell'area milanese nella fase metropolitana. Caratteri ed implicazioni, determinanti a partire dall'analisi di tre casi studio: Segrate, Assago, San Donato. Politecnico di Milano, A.Y. 1978-79: Author: A. Balducci, Sup.: P.L. Crosta.
[24] The Italian Ministry of Infrastructures and Transports defined "Contratti di Quartiere" (Neighbourhoods' contracts) as experimental programs of urban regeneration for deprived areas. More info available at: http://www.mit.gov.it/mit/site.php?p=cm&o=vd&id=60
[25] More info available at: http://www.comune.cinisello-balsamo.mi.it/cdq/index.htm
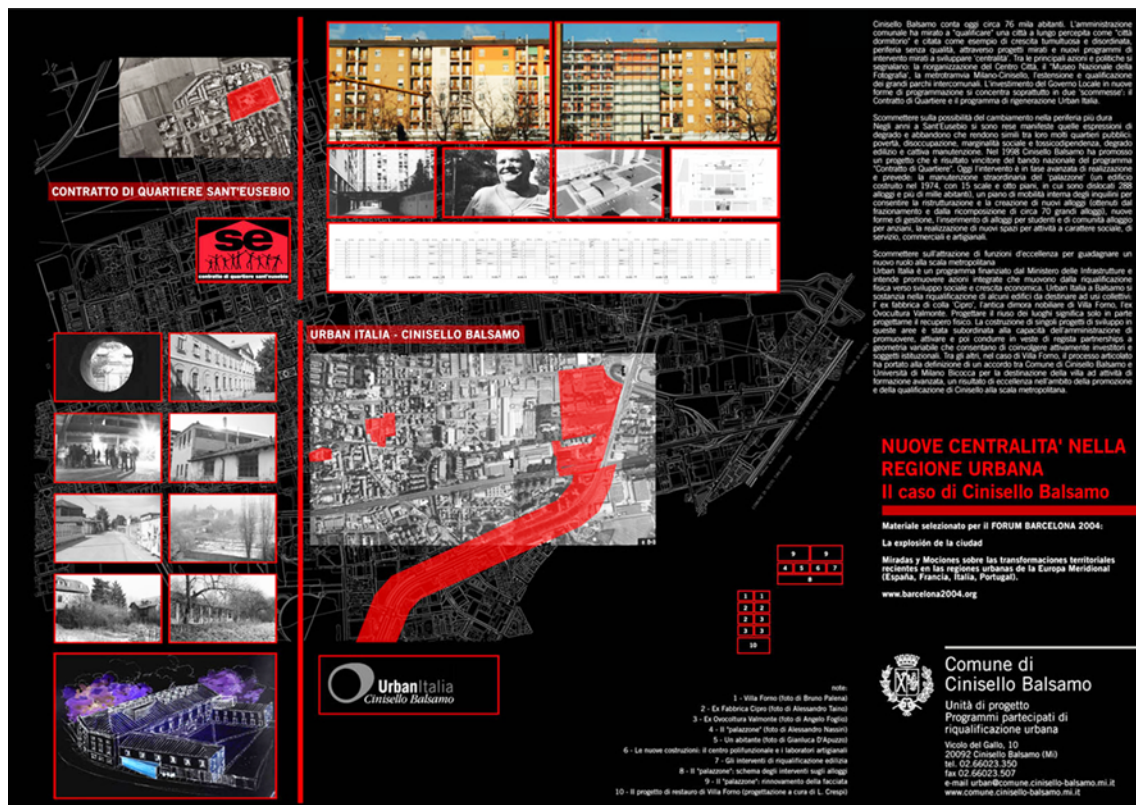
Figure 1: Regeneration program for Quartiere S. Eusebio (Cinisello Balsamo, I).
Source: Reprinted from Brochure by Project team, 2001.

MP: After these experiences with research and practice/consultancy, have you had the opportunity to continue working in the Milanese context using this integrated approach?

AB: Thanks to these early collaborations with local actors and a growing recognition of this specific approach – thanks also due to my academic research on the metropolitan dimension – I was asked by the *Agenzia di Sviluppo Nord-Milano* (later *Agenzia di Sviluppo Milano Metropoli*, now defunct) to coordinate a project that involved several different researchers (and among them, Gabriele Pasqui and Valeria Fedeli), aimed at developing a strategic plan for the North-Milan area. This plan, developed between 1998 and 2001, involved four municipalities (Bresso, Cologno Monzese, Cinisello Balsamo, and Sesto San Giovanni), a total area of 36 km2, and a population of more than 230,000. This proposal had several commonalities with the work on the S. Eusebio neighbourhood, including the involvement of stakeholders and the processual development of the plan.

After that I became involved in many strategic planning initiatives that applied a similar approach: in 2001-2003 the strategic plan for the *comprensorio Dalmine-Zingonia* (an area which affected 8 municipalities); in 2003-2005 the Strategic Plan for the *comprensorio Adda-Martesana* (an area of 28 municipalities), and others. Clearly, there is a link between all those stimulating experiences and my research interests in the processes of metropolisation and the strategic approach as form of processual planning.

It was during this period that I began a very important dialogue with Louis Albrechts about the nature and the character of strategic planning. That led to a number of publications and recently to the book co-edited with him and Jean Hillier *Situated practices of strategic planning. An international perspective* (2017).

MP: I think that one of the most important challenges you encountered to this approach arose in regard to the strategic plan for the province of Milan *Città di citt*à, which you coordinated.

AB: That plan represented a key moment for me, because I had the opportunity to test the approach I had elaborated in the preceding years. I challenged the limits of the concept of "metropolitan area" and the need for different tools and ideas to explore contemporary urban conditions. During this process, and together with a team composed of more than twenty people, we involved groups from different municipalities in seminars to help explain the influences that were affecting the transformation of Milan. During these seminars, we introduced the idea of the "Urban Region" in order to avoid the weakness inherent in the concept of metropolitan area for the Milanese case. Within this framework, we worked with this space as an overlay of ten different "cities"[26], thus stressing the role the volunteer aggregations of municipalities that we had encountered during our previous experiences. This process, which was already on-going, could be the essential element of a territorial project, and the plan provide a polycentric – but coordinated – description for the area (see Ch. 5).

Thanks to an oriented focus on on-going experiences, we also recognized the presence of an existing vibrancy in these territories, related to cooperation and innovative governance practices, and we pointed out many good practices through a specific tender. We also discovered that politicians and institutional stakeholders had a deep need for knowledge about the urban phenomenon, which was changing fast and about which they didn't have a clear awareness. During the same year, the Province of Milan was included in the Territorial Review of OECD[27], which confirmed that the extended dimensions of urban phenomena exceeded the administrative borders of Milan, and its realty as an aggregate of different systems and areas characterised by specific identities.

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[26] According to the plan, the Milan Urban Region was composed by 7+3+1 cities: 1. Vimercatese; 2. Monza and the hills of Brianza; 3. Western Brianza; 4. The Southwest; 5. Magentino and Abbiatense; 6. The Northwest; 7. Upper Milan; 8. North Milan; 9. The Southeast; 10. Adda-Martesana; and 11. Milan.
[27] Extensive information about this process is available in the OECD report (2006).
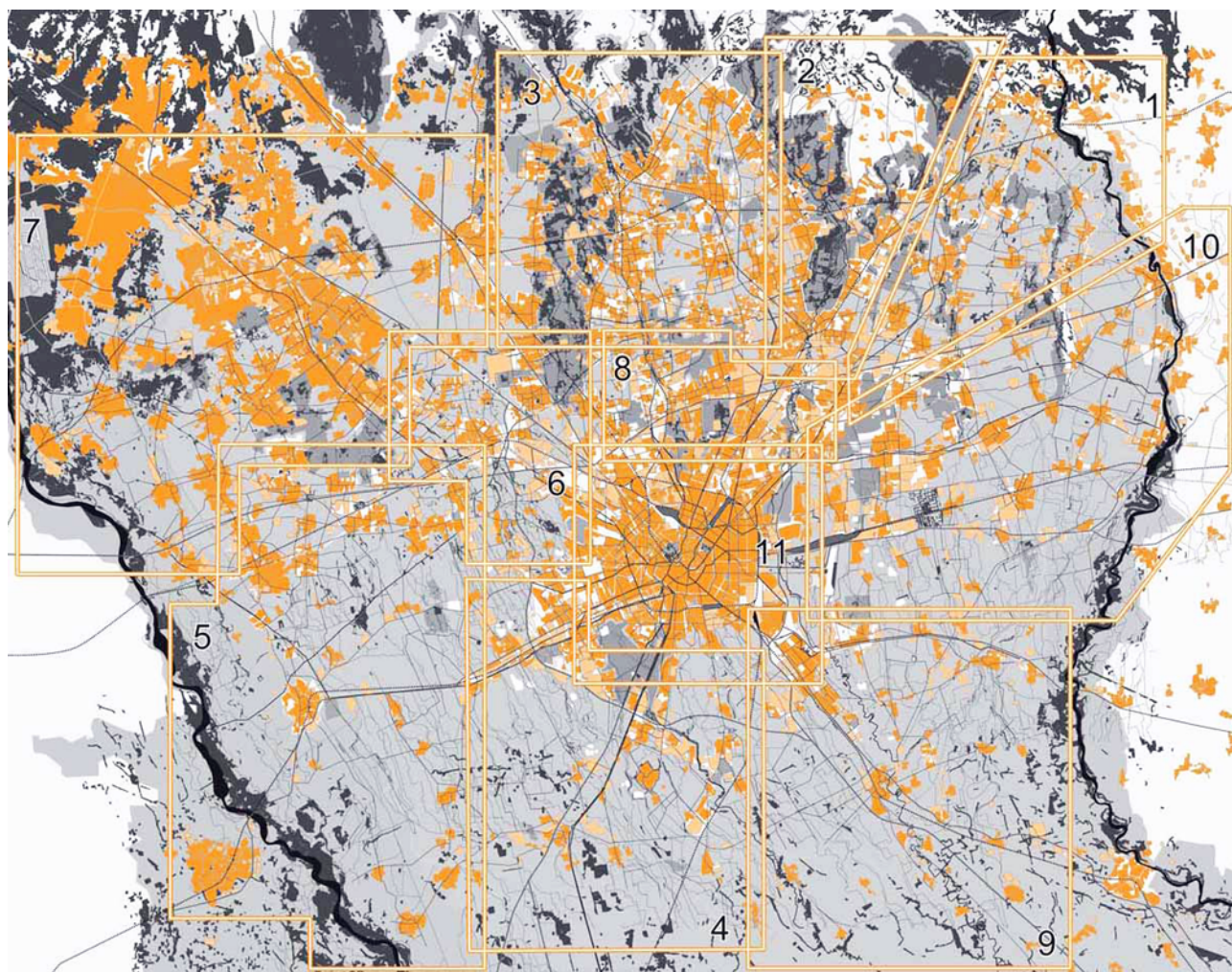
Figure 2: *Città di città* Strategic Plan: 7+3+1 cities. Source: Adapted from "*La città di città. Un progetto strategico per la regione urbana milanese*" (p. 80-81) by Provincia di Milano, 2006.

MP: What, in your opinion, were the key reasons for your involvement in so many different plans?

AB: I think there were several reasons. The first is the fact that strategic planning was at that time an innovation and we at the university were demonstrating a capacity to manage this new kind of planning process. The second reason was the network of political and technical actors (civil servants at various levels, etc.) that we gradually developed. The key factor of this network was the confidence of institutions in our approach. The "*Città di città*" plan, for example, was promoted by Daniela Gasparini, at the time the Councillor delegated to strategic planning for the Province of Milan, and former mayor of Cinisello Balsamo where we had successfully worked on the regeneration program (*Contratto di quartiere*) for Quartiere S. Eusebio.

MP: What were the main characteristics of this area? And what made it a testing ground for innovations in public policy, urban transformations, and metropolitan governance?

AB: The Milan Urban Region was marked by a mature process of metropolisation. Working on different areas in this context, I noticed that often the municipalities located in the crown of the city did not recognize themselves only merely the periphery of Milan. They wanted to play a different role. At the same time, they were discovering their limited weight as separate units, and the increasing relevance they could achieve when they were part of something (an association or a cooperative network). Therefore, they discovered their potential (in terms of territorial role) when (i) they achieved a critical mass (number of inhabitants, companies, and economic activities, etc.) and, (ii) they provided some innovation in terms of service provision (sharing and/or management) or territorial development (stimulating the economic sector). Within strategic planning, "*Città di città*", and many other projects, this potential become a key point for a shared vision of the reality of the metropolitan area and its possible future.

During the last three decades, the Milan Urban Region has become Balducci's field of research and work location. In this context he works with institutions (such as universities and public bodies) and representatives, and explores knowledge fields, scales of analysis, and action. For him, Milan is a space where spatial dynamics and urban tensions take place, where the speed of changes and the inertia of the existing settlements clash and co-exist, and where many of the phenomena pointed out in academic planning literature emerge. But it is also the field in which he had the opportunity to challenge his approach, to experience direct government and to interact with other actors involved in the processes of urban and regional development.

In the following chapters, the dialogue with him will focus on his experiences and research on the MUR, reflecting on the transformation of contemporary cities and how Balducci's work has contributed to the field of urban and regional planning.

2. WHAT KIND OF CITY?

The urban changes of the last half-century have been so rapid and so profound that the traditional categories of analysis for urban phenomena have been shaken to the core. The resulting confusion, which is also attributable to the not-always-disinterested actors intervening in the city for various reasons, has contributed significantly to the fact that such transformations have occurred outside any strategic vision concerned with common interests, especially in our country, although not exclusively. (Martinotti, 2017, p. 93)[28]

The preceding introductory overview focused on Balducci's cultural approaches and personal experiences. This second chapter outlines the main field of research and action of both authors: the current structure of the city, its nature, and (using the MUR as testing ground) its recent processes of evolution. In this light, my role changes, and the interview becomes a dialogue in which both subjects contribute: I propose a set of materials produced through my recent research and Balducci reacts to it.

In recent decades, many scholars (including Gandy, 2012; Font et al., 2007; Indovina, 2005; Friedmann, 2002; Lerup, 2001; Sudjic, 1992; Glissant, 1984; Vacca, 1974; Abu-Lughod, 1969) have employed notions that negate the concept of the "city" as a definite object that describes the current urban condition in the EU. In these images, urban environments are the result of the explosion of the city, and through it they achieve their new regional and/or landscape scale. The redundancy of those attempts, in which "there is no city, only different and diverse urban ways of life" (Cacciari, 2004, p. 7) - reveals the challenge faced by planners, geographers, and policy makers when they describe or interact with the contemporary city. According to Martinotti (2017, p. 95) this difficulty depends on both the metamorphosis of the object of study (the city) and the inefficacy of the conceptual tools developed by different disciplines to study it. This difficulty was first articulated by Lefebvre (1970), who emphasized the need for a different kind of mutual relationship between urban phenomena and their descriptors within the field of urban studies, to fill the vacuum that separates conceptual tools and things.

The following pages will explore the intrinsic dynamics of peripheral urbanization and their influence on the growth of urban regions (2.1). A focus on current disciplinary tools and narratives about Milan shows the need for new vocabulary based on hybrid concepts to help planners move beyond the consolidated approach with its binary oppositions (2.2). In this respect, Balducci has recently made important contributions that facilitate the identification of distinguishing characteristics of the Italian context as compared with international trends, with a focus on the Milan Urban Region (2.3).

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[28] "*Il mutamento urbano dell'ultimo mezzo secolo è stato così rapido e profondo che le categorie tradizionali di analisi del fenomeno urbano sono state intaccate alla radice. La confusione che ne è derivata, grazie anche al contributo non sempre disinteressato di chi a vario titolo opera sulla città, ha contribuito non poco a far sì che queste trasformazioni, soprattutto, ma non solo, nel nostro paese siano avvenute al di fuori di ogni visione strategica pensosa dell'interesse comune*".

2.1 THE POST-METROPOLIS AS A DIFFERENT KIND OF CITY

In the 20th century, changes to the way we live and move in space and how we produce and consume have accelerated. This has had an impact on the landscape and the growth of our cities and territories. An increasingly shared awareness recognizes that the results of these changes are "new – and original – formations, different from the consolidated urban realities" (Bonfantini, 2017, p. 76).

Recent socio-economic and technological transformations have made it harder to recognize the city as a no-longer defined phenomenon (Brenner & Schmidt, 2015). This process was relatively straightforward up until the industrial revolution, when *polis* and *urbs* took place in the same, definite space. It had specific features that clearly differentiated it from the surrounding rural land. This conventional view, based on the idea of figure-background and the pre-eminence of built objects compared to open spaces, describes the city as a limited object, clearly differentiated from its surrounding context. This is not just a morphological vision; Chapel (1975) and other scholars have pointed out that this difference between urban and rural environments also depends on other factors such as peculiar forms of economy, production, capital accumulation, interactions, and sense of freedom. Such view has been passed down over time – essentially unchanged – up to the modern paradigm, and until recently had been used to study, design, and manage European cities.

Today, this approach and other traditional concepts in the field of planning have become less useful as they are too rigid to understand a territory where urban materials (Infussi, 2003, p. viii) spread in a space that is larger than the consolidated city. It therefore seems necessary to overhaul the consolidated idea of city and, especially, to determine which of the many conceptualizations proposed in the last twenty years best reflect current urban realities and their possible future.

According to Martinotti (2017b, p. 18), current territorial transformations have been generated by a massive movement of population, and all the elements involved have been marked by these dynamics: the container that yields population, and the space that hosts it. Cities and their peripheral areas change together, according to the mutation of their populations.

The phenomenon is not the product of a single will or a single flow. On the contrary, it is the result of a complex combination of interrelated but independent dynamics generated by a very large number of individual and collective actors, each of whom pursues their own goals while trying to adapt their intentions to those of others in a complicated system of reciprocal interrelations, the product or which most often runs beyond the control and intentions of even the most powerful actors. (Martinotti, 2017b: 18)

These mutual interactions produce an environment that can be subsumed by and referred to the "city". According to Ferrao (2003, pp. 220-221), current cities are unacknowledged entities because they are not visible when planners look at them from a morphological and political point of view. Due to socio-technical and economic pressures, as observed by Choay (1994), dense historical settlements have slowly become diluted in favour of a fluid and indeterminate 'urban'. This point recalls the work of Lefebvre (1968), in which "urban" is a neutral term that is clearly differentiated from "rural" and "industrial". At the same time, the word does not preclude the presence of other realities, rather, it defines a situation of possibility where all of them coexist and are integrated. The urban, through its extension to the whole territory, reached an expanded, pervasive and extensive scale. Moreover, the consolidated variables that have traditionally been used to describe the city, namely size, density, and heterogeneity (Wirth, 1938), lose their effectiveness. In recent decades, urban systems have achieved complex patterns, marked by the simultaneous presence of processes (such as densification and desertification, shrinking and regeneration), dynamics (centrifugal and centripetal, where accessibility to global flows plays an important role together with digital and physical networks) and rhythms, unbound from spatial and temporal continuities (Soja, 2011b, p. 461). The result "represented by London and New York and Los Angeles, is a pattern of extremely long-distance de-concentration stretching up to 150 kilometres from the centre, with local concentrations of employment surrounded by overlapping commuter fields and served mainly by the private car" (Hall, 1997a, p. 11). Today, urban phenomena have exceeded consolidated administrative borders. This change has generated a new, original environment that is currently a fertile research area for planners, sociologists, economists, and political scientists.
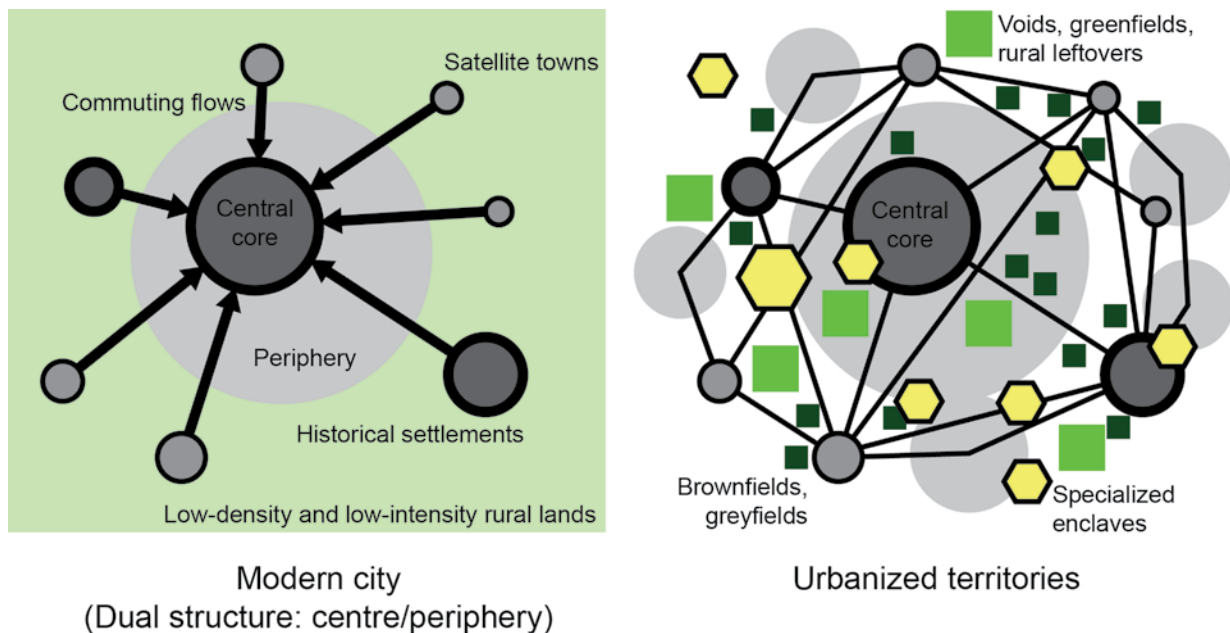

Figure 3: *A complex space: interactions between the urban and rural realm. Source: Paris (2018).*

Urban environments have become multiscalar realities (urban, metropolitan, sub-regional) sprawling over ever-larger territories where hierarchical, morphological, and functional differences persist. In these contexts, socio-economic and spatial convergences emerge, forming assemblages with a different and dynamic nature (Balducci et al., 2017a, p. 16).

Reflections on the contemporary city thus require a shrewd approach, one that can account for the reciprocal influences between consolidated urban settlements and their extended urbanization[29] (Brenner & Schmid, 2015), as well as the processes that have activated urban-rural spaces in recent years (De las Rivas & Paris, 2013). This means that interpretations should focus on processes of urban regionalization and their intrinsic dynamics (Wall, 1999). Within this context, Balducci's recent work has used ideas and concepts developed in international debates to examine Italian urban systems. He avoids the "rigorist position" (Martinotti, 2017c, pp. 23-24) obsessed with synthetic definitions and that often over-simplifies phenomena and their relationships. Instead, he focuses on urbanized territories and their characteristics. This artful strategy avoids the tricky insertion of assumptions about a changeable, heterogeneous, and multifaceted field of research, such as the city. This way, he maintains the freedom to move between different knowledge sets, scales, and ideas according to specific needs and goals.

In so doing, Balducci has revived the ideas of Soja on the post-metropolis as well as the concepts developed by Brenner and Schmidt on processes of urban regionalization. Introduced as the title of his 2000 book of the same name, the term "post-metropolis" has been used by Soja, to describe the space that emerges when the socio-spatial continuity of modern city, based on physical agglomeration, is broken. This environment becomes a system of relationships where networks and infrastructure innervate a space that simultaneously contains maximum spatial fragmentation and homogeneity of global logic (Rufì, 2003). The post-metropolis is the result of Soja's work on postmodern geographies (1989) and, especially, on the "exopolis" (1992, p. 50) viewed not as an amorphous replacement of suburbia but as a different kind of city that deserves a specific focus. Indeed, many authors have sought to define this space in a variety of ways[30], such as Lefebvre in his work on the spatial trialectics (Lefebvre, 1974) or the regionalists of 1970s.

To summarize the work of these authors in a few pages would be difficult and simplistic, but it is important to highlight the parallels between their research and Balducci's approach. In search of a method that could embrace the plural and dynamic character of cities (Balducci & Fedeli, 2008, p. 251), Balducci considered the concept of the "post-metropolis", as elaborated by E.W. Soja, to be a composite and hybrid portmanteau more than a fixed definition for the urban. According to Secchi (2000), planners should discard the idea of the contemporary city as an evolution of the modern one.

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[29] For Brenner and Schmid (2015, p. 167) the "extended urbanization process" involves: (i) the operationalization of places, that support everyday urban life, (ii) the construction and re-organization of infrastructure and (iii) the progressive appropriation of land from established social uses in favour of privatized, exclusionary, and profit-oriented modes.

[30] Amongst others: "The inevitable city of the future" (Doxiadis & Papaioannou, 1974), "Technoburb" (Fishman, 1987), "Edge city" (Garreau, 1991) or "Edgy city" (Walker, 1994), "The extended metropolis" (Ginsburg et al., 1991), "Metapolis" (Ascher, 1995), "Generic city" (Koolhaas, 1995), "*Ciudad dispersa*" (Monclús, 1998), "*Ciudad sin confines*" (Nel-lo, 1998), "Regions that work" (Pastror Jr. et al., 2000) and – more recently – "Postborder city" (Dear & Leclerc, 2003), "Cities without cities" (Sieverts, 2003), "New forms of urbanization" (Champion & Hugo, 2004), "*Città infinita*" (Bonomi & Abruzzese, 2004), "Metropolised territory" (Indovina, 2007), "Endless city" (Burdett & Sudjic, 2007) or "Metroburbia" (Knox, 2008).

Following Soja's approach, scholars should use the post-metropolis as a reference to describe a transitory condition, an evolutive process based on continuous change more than a fixed phenomenology. As such, Balducci no longer considers the urban in the contemporary city as merely a specific place, but also a global meta-process of continual change (Friedmann, 2014, p. 559) and he uses the post-metropolis as a descriptive tool for the formation and the transformation of this meta-process. One of the peculiar characteristics of the various immeasurable dimensions of the urban reality (Pollak, 2006, p. 127) is their volatile condition and their detachment from administrative and institutional boundaries.

Thus, within this space of complex formative processes and liquid hierarchies (Baumann, 2011), administrative borders are no longer the reference for theories on – and the governance of – urbanized territories. At the same time, the solution for this *impasse* cannot be the enlargement of these borders, or the recourse to the out-dated concept of the "metropolis".

This scale, often indicated as the "right distance" from which to think about contemporary urban phenomena, now represents a sort of obstacle to effective comprehension due to its intrinsically monocentric structure. In perspectives on the metropolitan, the peripheral space shows a progressive blur of housing and poor functions in suburban spaces. In contemporary urbanized territories there are many different realities that are more complex and articulated. Conversely, the result of recent urbanization processes is a space characterised by local systems and settlement patterns, where new configurations and alternative practices of spatial colonization emerge. Their co-actions define the character of this environment as a kaleidoscope of fragments (Soja et al., 1985) or enclaves (Secchi, 2013, p. 48).

Approaching post-metropolitan territories

MP: In your work on the Milan Urban Region, what motivated your interest in its post-metropolitan condition?

AB: Among Italian cities, it is in Milan that the phenomenology of the "post-metropolis" as defined by Soja is most evident. Even more so than the central strip of the Veneto Region studied by Indovina and Secchi, which is interesting for other reasons. The Milan Urban Region underwent a process of metropolisation that evolved over the past few decades. I had the opportunity to meet Soja in Paris a few years ago after our respective presentations at an international seminar on the metropolitan dimension of urban issues. I remember questioning the idea of metropolitan governance and the real effectiveness of a metropolitan authority as a solution for the problems related to the transformation of EU cities. We agreed that there was a need for systematic research on the topic in Europe, especially in contexts where new interpretative tools and planning concepts have been less effective in explaining current urban transformations, as in Italy.

MP: In your opinion, what elements of the concept of the post-metropolis are most interesting?

AB: More than the definition of the post-metropolis per se, what I find most interesting is Soja's focus[31] on the need for radically new approaches to urban and regional theory and practice. Our research on the regional dimension of contemporary urban systems should move beyond the rigid dualism between urban and suburban forms and focus more on functional networks and territorial and hierarchical relationships.

This is evident if we look at density (of population, business and companies, etc.) and its "flattering" process[32] between consolidated urban cores and peripheral areas. The progressive urbanization of the region doesn't generate a low-density suburbia, but rather a more complex and articulated environment. In the past few decades, the progressive sprawl of the population in the Milan Urban Region has affected the central city (which has long been losing its inhabitants) and the municipalities of its first and second peripheral crowns. Following sectoral, minimal, and opportunistic logic, productive, logistic, and tertiary functions assumed spaces in this enlarged urban space. In this context, the consolidated "centre-periphery" opposition become a weak descriptive artifice, and scholars now need to shift their attention to "peripheral urbanization"[33] and its dynamics. This approach reveals the metaprocess of continual change[34] in the contemporary urban city, rather than a fixed description of a specific context.

MP: What research have you conducted on the post-metropolis?

AB: I coordinated two PRINs[35] on these issues. The first, entitled *I territori della città in trasformazione: innovazione delle descrizioni e nelle politiche* (Territories of the city in transformation: innovative descriptions and policies), conducted in 2005-2007, focused on the impacts of new socio-spatial practices on territories and relative settlement patterns. At the same time, together with other groups (from Politecnico di Milano, Università degli Studi di Roma "La Sapienza", Università degli Studi Roma Tre, Università degli Studi di Firenze, and Università IUAV di Venezia) I engaged in research on the need for "public goods", especially territorial ones.

Working along these two main axes (the disaggregation/re-articulation of territories and the notion of public goods), those studies explored how plans and planning tools work in these territories and provided a new set of descriptions and interpretative frameworks able to stimulate policy renewal.

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[31] Soja, E.W. (2015) *Accentuate the regional*, International journal of urban and regional research, 39 (2), p. 375.
[32] Balducci, A., Fedeli, V. & Curci, F. (2017e) *Milan beyond the metropolis.* In: Balducci, A., Fedeli, V. & Curci, F. (eds.) (2017a) *Oltre la metropoli. L'urbanizzazione regionale in Italia.* Milan, I: Guerini e Associati, p. 31-28.
[33] Soja, E.W. ibid., p. 376.
[34] Friedmann, J. (2014) Becoming urban: On whose terms? In: Brenner, N. (ed.) (2014) *Implosions/Explosions: Towards a study of planetary urbanization.* Berlin, D: Jovis Verlag, p. 559
[35] Projects of National Interest, founded by the Italian Ministry of Education, Universities, and Research (MIUR), finance research projects proposed by Universities and support interactions among various stakeholders in the national/international research system (More info: http://prin.miur.it/).
[36] The results of this research have been published in Balducci, A. & Fedeli, V. (eds.) (2007) *I territori della città in trasformazione.* Milan, I: Franco Angeli. More info about the research proposal: http://cercauniversita.cineca.it/php5/prin/cerca.php?codice=2005088350

The second PRIN, *Territori post-metropolitani come forme urbane emergenti: le sfide della sostenibilità, abitabilità e governabilità*[37] (Post-metropolitan territories as emerging urban forms: the challenges of sustainability, habitability, and governability) presented for the call 2010-2011, carried out in 2012-2014 (and extended to 2016), focused on transformation processes in cities and the growth of urban regions in Italy (see Textbox 2). We adopted a transversal approach and developed an Atlas (www.postmetropoli.it) of all the territories characterised by the kinds of dynamics described by Brenner and Schmid or Soja. Our goal was to offer evidence with which to compare Italy to other European cases. Existing consolidated studies on the transformations of European cities, such as Hall and Pain's 2006 work on mega-city regions[38], hadn't considered Italy. In Northern Italy such processes had unique results, producing a specific reality that is comparable to that generated in Randstad Holland or Central Belgium.

Through our research, we sought to lend more importance to the "national" mission of the PRIN, and we developed an analytic approach that encompassed diversities, local characteristics, and their heterogeneous spatial outputs. The overall objective extended beyond the mere generation of a geographical description: we also reflected on the implications of such transformations in terms of governance.

MP:But I supposed that the direct application of an approach developed by foreign scholars in a different context could represent a challenge, as pointed out by Healey[39], especially in light of the rich heterogeneity present in Italy.

AB: Soja pointed out that these processes of re-configuration of the urban are not an original product; they have a long history. Although his focus was on Los Angeles, he detected these processes in several different countries around the world. This was the approach that we adopted in the PRIN, for two principal reasons: first, we wanted to propose Italy as a case study in the international debate on the transformation of urban, where it is generally ignored. We involved several different scholars[40] - including Soja - in the scientific committee, and we pushed them to recognize Italy as a relevant testing ground for these issues. Second, we wanted to show the differences and peculiarities of the Italian case, eschewing any interpretations that related the phenomenology to regional urbanization in Italy through a simplistic reduction to the interpretative concept of the "post-metropolis". After all, Soja had used this idea as a provocation, to point out the limits and weaknesses of the concept of "metropolis".

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[37] More info: http://cercauniversita.cineca.it/php5/prin/cerca.php?codice=20108FE3MW

[38] Hall, P., Pain, K. (2006) *The polycentric metropolis. Learning from mega-city regions in Europe.* London, UK: Earthscan.

[39] Healey, P. (2012) *The universal and the contingent: some reflections on the transnational flow of planning ideas and practices*, Planning Theory, 11 (2): 188–207.

[40] The Advisory Board consists of: Prof P. Ache (Radboud University Nijmegen, NL), Prof L. Albrechts (emeritus, Katholieke Universiteit Leuven, BE), Prof S. Davoudi (Newcastle University, UK), Prof Ch. Lefèvre (Université Paris-Est Marne-laVallée, FR), Prof K.R. Kunzmann (emeritus, Technische Universität Dortmund, DE), Prof W. Salet (Universiteit van Amsterdam, NL), Prof I. Tosics (Metropolitan Research Institute - Varoskutatas Kft, Budapest, HU).

MP: But this research sought to produce more than just a descriptive tool. What other goals were achieved?

AB: The first main achievement of the research on the Italian post-metropolitan condition was to successfully describe on-going processes and dynamics. To do so, we integrated existing qualitative analyses and studies with quantitative ones, focusing on data and indicators. This created some continuity with Itaten[41], the last national research project on these topics, although the radically different territorial patterns and emerging phenomena described in that study had since reached a mature level of development (urbanization, aggregation, etc.). And second, we identified unique issues related to new forms of urbanity in these territories.

Through this work we established a quantitative, solid base upon which to produce further study of these territories to better understand the characteristics of urban regionalization in Italy, emerging urban profiles, and the ultimate impact on the country as a whole. While this result does not represent the solution to the problem of "how to work with existing urban regions", it does offer a factual premise within which to address the issue.

As emerges in the interview, several authors (including Portas et al., 2011; Secchi, 2000) have noted that the contemporary city is a radically different subject from the modern one, the former being more than a simple evolution of the latter. As such, the image of the "explosion of the city" (Font, 2007) represents a sort of creative process, in which urban materials, functions, and populations transcend the dimension of consolidated, modern cities and appear in a larger context. The work of Balducci focus on territorial impacts of this transformation and the exploration of its conditions of transformability. During our discussion, he pointed out two parallel needs in the field of planning: renewed knowledge of cities and urbanized spaces to help planners define new approaches to current and future territorial issues, and effective tools to support practitioners and scholars in their exploration of current urban phenomena. In the following section, we will discuss both of these needs.

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[41] The study, funded by the General Directorate for Regional Coordination of the Ministry of Public Works, involved researchers from sixteen Italian universities. In 1996, Clementi, Dematteis, and Palermo published the main findings in the two-volume book *Le forme del territorio italiano* (The forms of the Italian Territory), which came to be regarded as a fundamental study of the Italian territory, a useful tool for planning actions at the national and regional level, and a source of original comparisons with other European situations.

2.2 ABOUT ANALYSIS: IN SEARCH OF A CONTEMPORARY TERRITORIAL NARRATIVE

From the 1970s on, socio-economic and technological changes have prompted a series of physical transformations in EU territories. According to Memoli and Rossignolo (2011), the modern structure of the city – which was polarized and ordered – has become an urban system, sprawling in space, where relationships depend more on functional complementarities than physical proximity. In this context, where consolidated settlement patterns and strategies mesh with other living practices driven by contemporary pressures and influences, planners can no longer rely on traditional references. Practitioners and scholars are experiencing a change of scenery in the field of planning that affects both the object of study – the space and the city – and the tools of the discipline. They are therefore forced to abandon old approaches based on shared concepts, antithesis and binary opposition, and assumed paradigms (see Table 1), and to adopt new approaches that better comprehend the current nature of urbanized territories.

TABLE 2: CONSOLIDATED REFERENCES IN THE FIELD OF PLANNING

Consolidated References	Examples
Shared concepts	Limits and borders Measures Differences Statutory definitions
Antithesis/Binary oppositions	Centre/periphery Urban/rural Inside/outside Close/far Monofunctional/Multipurpose Stability/change Subsidiarity / decentralization
Assumed paradigms	Continuous growth Concentration/Positive congestion Density as urban indicator Continuity as urban value

Source: Elaboration of Paris, M. (2018)

This circumstance raises a rich set of questions that current research in planning has only partially answered. For example, should research focus on new concepts/antithesis/paradigms, or should planners accept that they cannot share transversal concepts thinking on contemporary cities? Would a new vocabulary be enough? And what about consolidated concepts? Should planners only espouse hybrid and composite concepts to describe the territory as the product of what "people do", as defined by Crosta and Graziosi (1977)?

Textbox 2: A few notes on metropolitan transformation by Prof. W. Salet

Three domains of metropolitan transformation

The contested transformation of metropolitan urbanization goes through the next three interdependent social domains:

    a. The social, economic and cultural changes in society;
    b. The spatial uses of land;
    c. Institutions.

The interrelationships of the three domains are highly interdependent but their interaction is nor symmetric neither synchronic. The first changes of urbanization take place in the volatile domain of social, economic and cultural changes of society. These changes are not guided by public perspectives or planning, they are a result of social initiatives and economic investment. The transformation of city-regions starts in this domain. The second domain (spatial uses of land) usually follows these changes, accommodating the uses of space for new investments and consumers choices rather than anticipating and guiding these activities via spatial planning. There are some rare international examples where spatial planning anticipates on and guides the processes of urban proliferation, for instance the famous networks of transportation in metropolitan Tokyo that anticipated and guided the urbanization in the surrounding territories of the core city. Usually, however, spatial development simply accommodates the spontaneous (and often market led) social processes in the first domain. In these cases spatial planning has to correct afterwards the untamed processes of urbanization. This is a problem and a huge challenge for the profession of spatial planning. The third domain (the state of institutional conditions) is the slowest changer in processes of metropolitan transformation and partly causes the problems of the delayed spatial response. The emerging urban spaces at city-regional level of scale are not yet institutionalized as city-regional places, the urban outskirts are morally owned by many but not by city-regional problem owners. In this sense, these urbanizing spaces represent 'nobody's land'. There is no evident institutional embedding of planning.

The practices of metropolitan transformation are characterized by cherry-picking, in particular by the major powers: the state, the core cities and the market. Facing the problems and opportunities of the emerging city-regional spaces, the state is selectively interested in nodes and interconnections of national infrastructure (such as airports or fast-speed railway stations). The major core-cities are interested in selected core-centric expansion, and the market is interested in shaping its own galaxy of economic spaces. Not seldom, the core cities and the national states are impediments rather than catalysing forces in the processes of metropolitan transformation.

Textbox 2: A few notes on metropolitan transformation by Prof. W. Salet

The interaction of purposive processes of planning and institutions (public norms)

Planners, urbanists, and landscapers promote purposive strategies of metropolitan transformation. In many cases they initiate processes of social mobilization, resulting in fascinating experiments of spatial and environmental planning. Yet, it appears problematic to normalize the city-regional planning practices, it is difficult to mobilize systematically the needed resources and to acquire social and political legitimacy for purposive strategies at city-regional level. Institutionalized routines seem to delay the process of metropolitan transformation. For this reason, many participants suggest it might be better to neglect the role of institutions and start fresh relational strategies of purposive action beyond the established institutions. My suggestion - in contrary - is to pay actively tribute to the meaning of institutions in their interaction with purposive strategies of action. I consider institutions as patterns of public norms of a community. This may be local, national or non-place bounded communities. The public norms may be social, cultural, economic, political and even formal in case of legal institutions. The challenge of metropolitan transformation is that the constituting communities of the public norms have to change. This takes time. The city and the pre-urban surroundings of the previous stage of urbanization have been inflated and pulverized by social and economic activities in emerging city-regional spaces but the old concept of city and country is still existing in the public norms (sets of cultural, political, economic, and legal norms) of the community. It is still dominant in the mindset of the population, and its public representatives. There is not yet a city-regional community. If there is a planning at that level, it might be an initiative of planners, landscapers, urbanists and interrelated public officials but it is planning without a public (or even worse, just selectively organized interest groups). Institutions are about the legitimacy of public action, no wonder there is a problem of legitimacy in the emerging city-regions. Yet, institutions are badly needed. In present stage, a good deal of institutional conditions is still preserving the city of the past but they are not unchangeable. Institutions are never fixated; their meaning is carried forward in changing practices. Both purposive strategies and institutional conditions (patterning of public norms) change in practices of action. They are interrelated. However, there pace of change is different. Purposes may change fast in the problems and opportunities of the here and now, they are situational (Salet, 2018). Institutional conditions depend on processes of normalization in numerous practical situations. They are not performative but fulfill a conditional role in purposive performances. Their changes are more gradual but their role is crucial, in particular in processes of transition where their innovation is needed. Institutional innovation is not evident, their processes of innovation often go forward and backward. The normalization of the city-region is a challenge, it has to be conquered. This is not wishful thinking. The more the 'wild-west' regionalization of the urban proceeds, the more the public will experience its problems, and the more the needs of changing purposes and the normalization of these strategies will be felt. I claim that a deliberate double strategy of purposive action and normative institutionalization is the best way to respond to the current trends of metropolitan fragmentation.

Textbox 2: A few notes on metropolitan transformation by Prof. W. Salet

Parsimonious strategies of public action

In the recent decades, a lot of relational city-regional initiatives is based on cooperation between representatives of society, market and public agencies, starting with joined purposive objectives but eventually failing to arrive momentum because of lacking cohesion and support. Sandro Balducci correctly concludes that the dependence of relational strategies on voluntary cooperation is not just their potential strength, it is also the weak link in these relational coalitions. In particular in the first stage of metropolitan transformation, city-regional initiatives frequently are turn down to lower ambitions or cancelled. New initiatives have to be relational but without anchoring in established organization where social and political power and legitimacy is organized, it appears difficult to mobilize the resources needed for effective action. The forms of cooperation have to draw existent authorities into new directions.

'Conquering a new field' means organizing commitment on concrete issues with bottom-up backing. The old planning style of designing comprehensive future perspectives for a spatial territory are by far too ambitious and planner-centric; at level of city-region they tend to swim in a social context of emptiness. Purposive strategies should build on real tendencies in society, the planning should search the places where the action actually is taking place (where social initiatives and peripheral experiments are taken, and where the financial investment of markets is going). It makes sense to investigate how these real and fragmented activities might be socially balanced, adapted and improved from a public perspective. For instance, the spread-out of mono-functional centers in regional spaces should be taken seriously rather than being neglected because they don't fit in comprehensive schemes of urban compactness. The social and economic uses of new city-regional spaces are very dynamic and innovate these peripheral spots, although in the first instance they often only seem to enlarge fragmentation. It is the new reality that has to be elaborated upon from a public perspective. Once used to this kind of analyzing real changes and responsive strategies of action, planners may become again more anticipative in anticipating and attempting to guide these in deliberate ways. Paris and Balducci bring very useful experience about these considerations.

Being parsimonious is a crucial adage when new urban fields are conquered without an articulated public. A focus on explicit problems is more effective than providing multi purposive objectives. As Balducci, Fedeli and Pasqui (2011) pointed out in the evaluation of the early Citta di Citta project: the concrete mission of improving the 'habitability' of emerging urban spaces (inspiring herewith a plethora of operational local initiatives, including a competitive festival of projects) worked much better than comprehensive integral plans because legitimacy and cooperation has to be conquered in a highly divergent and often not yet socially and politically articulated urban field. In my own research of Randstad South in The Netherlands, several city-regional planning perspectives had failed since the early 1990s, until recently some successful breakthroughs took place within the narrow space of sector domains. The first was a city-regional network type connection of public transportation, the second a landscaped fortification of the coastline between Rotterdam and the Hague.

Both are sector initiatives rather than integral innovation but undoubtedly will be followed in next decade with additional initiatives from different perspectives (spatially enriching and establishing urban activities and housing at the new nodes, recreation, etc.) that make use of the newly created opportunities. City-regional planning does not start with integrated perspectives, they have to grow with increasing support. The city-regional agenda will most probably follow a problem ridden trajectory focusing on burning issues of metropolitan transformation, such as in particular the increasing social polarization at the city-regional levels of scale, the climate problem with the requirements of renewable energy, the no-waste management and water exploitation, and the issues of accessibility and its distribution for all segments of the urban population.

Light institutionalization via legal bonds

Challenging and redefining patterned norms is crucial in order to build up legitimacy for metropolitan transformation and to condition the fluctuating purposive strategies. As Sandro Balducci and colleagues demonstrate relational and border crossing strategies of governance will be needed rather than static policies of established territorial authorities, but established authorities should be actively involved in these networks. Experimental strategies are not beyond governmental agencies and existing functional authorities but require a new relational role of these and other involved agencies. Even then, cooperation is fragile and further institutionalization of relational governance will be needed in order to cope with the vulnerable dependence on voluntary cooperation. Cooperation is essential but suffers of volatility in a context of divergent constituents. Light forms of institutionalization and legal binding might be useful to escape the unboundedness of voluntary cooperation without shaping new instrumental hierarchies. Legal bonds are not the exclusive predicament of hierarchical authorities, they might foster experimental strategies as well. A light form of legal institutionalization might be helpful to condition the experimental purposive strategies. Extremely important, here, is to sift what should be legalized and what not. The distinction between public norms and purposive objectives is helpful to make this distinction.

The planning discipline may find some inspiration in the political and legal strategies in international political relations. A very interesting method to cope with the volatility of cooperative networks is to search for 'legal obligation' (Brunnée & Toope, 2010; Salet, 2018). It is a strategy widely used in international relationships where in the absence of hierarchical positions, the unevenness and divergence of interests of national states makes it extremely difficult to reach coordinated decision-making. Observers like Scharpf concluded decades ago that positive coordination between sovereign states rarely is achieved and that coordination at best might be reached as form of negative coordination (which is limited to avoidance of contradictions). The strategy of 'legal obligation' is an approach with the potential to overcome these stalemates. Legal obligation is a bottom-up strategy of states that recognize the problem of unbounded cooperation and seek legal binding of shared norms without urging all participants to the same program of purposive action.

Textbox 2: A few notes on metropolitan transformation by Prof. W. Salet

As explained in Salet (2018, p.74) "international law makes a virtue of necessity by respecting the different positions and different policies of states while organizing a normative process of shared policy-making". States seek cooperation because they share concerns about social problems. Their problems to achieve effective cooperation are usually not in the problem to acquire shared norms but in the large differences of the related national policy programs (public investment, taxation, national purposive policies, etc.). There are always forerunners and laggards in international processes of cooperative policy-making, don't sanction the laggards (Brunnée & Toope, 2010). In the strategy of legal obligation, the different ways of action are not considered as a problem but as an asset of joined policy making. The legal binding focuses just on the crucial public norms and in addition to these relatively soft procedural commitments are provided in order to 'monitor' the outcomes, to 'investigate the performances of different strategies', to 'compare the different outcomes' and to 'benchmark the different ways of action'. The soft strategies of mutual understanding ensue a gradually growing sense of mutual legal obligation. This strategy is widely used in international politics and international law, it might be very useful to apply this form of light institutionalization of public norms in relational city-regional cooperation and to make a positive use of the different purposive actions at local level rather than sanctioning the deviant or 'slower' constituents. The combination of legally binding norms, the recognizing of different purposive strategies and the soft regulation of continuous interaction between the constituents in order to improve the interaction between the different performances in the light of the normative conditions, may foster the establishment of innovated institutions and provides also an alternative for previous planning strategies that tended to the formalization of hierarchical plans of action.

In their attempts to answer these questions, planners who study the current urban condition of European territories should use concepts and ideas able to detect more than consolidated interpretative tools, which merely view cities as dense, continuous, and compact. A new perspective on the city starts with the integration of existing knowledge and practices with alternative tools, focusing on the strengths and weaknesses of contemporary urban habitats, which are characterised by discontinuity, mixtures, interactions between urban materials and unbuilt spaces, and different sizes of each fragment.

The integration of consolidated and alternative approaches has been experimented by several authors who interpret the space through landscape sensitivity (Vogiatzakis & Griffiths, 2012; Bennett & Saunders, 2010; Waltner-Toews et al., 2008; Farina, 2006; Lindemayer & Fischer, 2006; Turri, 2001). They, in turn, have based their approaches on Forman (1995) and his work on land mosaics, a metaphor he employs to explain the condition of contemporary territories. More specifically, Forman identifies the need for planners – in their local-scale cognitive endeavours – to broaden their focus to include whole spaces, where the composition of fragments creates figures (like the tiles in a mosaic). Fragments/pieces are heterogeneous spaces, with varying dimensions and hosted uses. The mosaic perspective connects different pieces, relates pieces and places, and creates figures (Secchi, 1994).

Using this concept of land mosaic, planners have developed a systemic approach involving a set of scales, attention to complexity, and sensitivity to local situations. Together, these variables allow planners to overcome the consolidated analysis, which was strictly based on administrative borders, and to study phenomena that have acquired diverse, changing, and transitory dimensions. In a framework characterised by fleeting borders, fragmentary juxtapositions, and relationships of varying degrees of intensity, these analyses connect local realities, a product of urbanization processes, with supra-local patterns (sub-regional, regional, macro-regional, etc.). To achieve this, planners should view the territory through a deeper, multi-disciplinary lens that can support a twofold outcome. First, this approach should strengthen current territorial interpretations, introducing intermediate scales and a holistic perspective (in stark contrast to some current sectorial-based interpretations). Second, it can unveil current over-simplifications based on suggestive images and definitions (infinite city, sprawling city, generic city, urban archipelago, etc.), often borrowed from other fields that are not very effective in comprehending current spatial complexity and are useless in managing its development.

According to Forman, the land-mosaic approach understands territorial patterns in terms of various components (fragments), their mutual influences, their peculiar differences (and not just the morphological ones), and their specific characteristics. Odd fragments will also appear that manifest a multiple spatiality (Ascher, 2001) and play a more important role within territorial hierarchies, as is discussed in subsequent chapters.

It this process, the analysis shifts from a taxonomic classification of every single piece to a performative focus on their qualities and the intensity of their interactions. Inspired by complexity science and studies of non-equilibrium systems applied to cities and regions (White et al., 2015) the process emphasizes the territorial role of fragments and the influence of close geography (topography, climatology, presence of water, infrastructure) and socio-economic factors (existing territorialities and vocations, networks and reticular relationships, etc.)[42].

This relationship is based on a combination of different spatial phenomena that generate a new urban environment (functional dispersion in an increasingly large territory, increased flows and activities in urban peripheries, physical transformation of the consolidated city or urbanization of large peri-urban spaces, etc.). As spatial experts, planners should consider the settlement of pieces in order to understand new territorial structures and local adaptations to global forces (social, economic, and technological). Their work should entail the construction of new relationships of meaning that link different fragments in the space to "the whole" through a specific logic, as advocated by Secchi (2000, p. 65).

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[42] I developed this view thanks to two conversations that I had the opportunity to share with Paola Sturla and Luca Gaeta. Sturla introduced me to the field of urban ecology as developed by American landscape architects and planners, and pushed me to study a set of authors that influenced my approach to the issue of nature in the city (such as R.T.T. Forman, C. Waldheim, J. Corner, C. Reed, A. Berger). Gaeta introduced me to the idea of "figures" during the second round of NUL conferences (New Urban Languages) held in Madrid in 2014, where I presented the paper "Re-thinking antitheses. How to overcome the "urban/rural" opposition in two metropolised territories" Without their input, I probably would have remained anchored to a more traditional position.

The work of Forman demonstrates how planners, by updating their conceptual tools and changing their scale of analysis, can achieve a different awareness of space, passing from static descriptions to interpretative ones. Through this innovative shift, practitioners can overcome the antithesis in the description of the territory. As a matter of fact, in Forman's view different fragments collaborate – often accidentally – to form figures. The progressive recognition of these figures allows practitioners to detect the patterns, rules, emerging phenomena, discontinuities, and innovative forms (Pavia, 2001, p. 32) of urbanized regions.

This approach was implemented in the Itaten research, which sought to describe transformations of Italian territories by producing a new set of interpretative images (Clementi et al., 1996). Although more than twenty years have passed since the methodology was first developed, it still represents one of the most appropriate research tools for the contemporary territory because it focuses on relationships and interactions, proposing original representations of urban spaces, and because it considers different times and rhythms together, overlaying continuous changes on unique territorial inertias.

Within the spatial complexity of urbanized regions, a limited number of figures appear and form different patterns, marked by a heterogeneous multiplicity, where planners can identify sequences, iterations, and circuits.

The figures, like Foucault's heterotopies, often have the ability to juxtapose, in one single, real place, different spaces and places that are incompatible. They capture a specific relationship, in the moment it exists, in a precise location: if settlement conditions, lifestyles or market conditions change, other figures will arise. (Pavia & Ricci, 1996, p. 58-59).

According to Monclús (1998), the concept of figures allows one to conceive of urban space as an accumulative space. Through a self-organized process, the specific values that mark the individuality of the elements of the system achieve their own identity. This process depends on the adaption of fragments to specific conditions and local opportunities.

Several authors have begun shifting their attention from the analysis of fragments to the identification of atlases of figures and images, introducing spatial descriptions that are mobile, kinetic, and dynamic (Clementi et al., 1996).

Post-metropolitan territories as emerging urban forms: the challenges of sustainability, habitability, and governability

Scientific coordinator: Alessandro Balducci - Duration: 36 months (2012-2014).

This research project financed by the Italian Ministry of Instruction, Universities, and Scientific Research (MIUR) offers methodological, empirical, and conceptual contributions to the new "theory of the urban" in the national context.

Researchers assumed that regional urbanization is a global, multi-scalar process that presents original features. The products of this process are territories and spaces that vary in form and function from those studied using the concepts of city or metropolis. Therefore, concepts like "density" and "proximity" are less and less significant in describing such spatial and social formations giving rise to the need for new ideas and tools to study these transformations. These are key issues for both the scientific community and society in general, especially for local populations, and it embodies one of targets of the Horizon 2020 program.

Drawing from international literature on «post-metropolitan» territories, the project explored:
- emerging urban forms in Italy, analysing similarities and differences in comparison with traditional ones (Investigations);
- the living and urban conditions produced, with a focus on new "urban issues" (Issues);
- the ability of these spaces to address current social challenges, and their role as habitats for contemporary societies (Challenges).

The general aim of the project was to provide planners, politicians, and civil servants with innovative and effective tools to deal with emerging urban issues. The project focuses on urban planning and policy debates through a multidisciplinary approach. In recent years, the European Union has promoted the role of cities as a tool for ensuring cohesion and sustainability, and the project incorporated this urgency by considering the Italian context as a fertile testing-ground*.

The extensive network of the PRIN involved an International Advisory Board and research units from eight different Universities. Professor Peter Ache (Radboud University Nijmegen, Netherlands), Professor Louis Albrechts (emeritus, Catholic University of Leuven, Belgium), Professor Simin Davoudi (Newcastle University, UK), Professor Christian Lefevre (Universite Paris-Est Marne-la-Vallee, France), Professor Klaus R. Kunzmann (emeritus, Technical University of Dortmund, Germany), Professor Willem Salet (University of Amsterdam, Netherlands), Professor Ivan Tosics (Metropolitan Research Institute, Budapest, Hungary) took part to the International Advisory Board.

* The official presentation of this project, in Italian, is available at:
http://cercauniversita.cineca.it/php5/prin/cerca.php?codice=20108FE3MW and on the website of the research: www.postmetropoli.it

Research Unit of the Politecnico di Milano coordinated by Professor Alessandro Balducci, Department of Architecture and Urban Studies (DAStU). Academic staff: Alessandro Balducci, Matteo Bolocan Goldstein, Paola Caputo, Francesca Cognetti, Luisa Collina, Bruno Dente, Marco Facchinetti, Valeria Fedeli, Paolo Galuzzi, Anna Meroni, Federico Oliva, Paola Pucci, Agnese Rebaglio, Gianni Scudo; Research fellows/post-doctoral researchers/research assistants: Simonetta Armondi, Lorenzo Bartoletti, Marco Bonomi, Simone Busetti, Francesco Curci, Marika Fior, Chiara Galeazzi, Elena Giunta, Francesca Manzoni, Stefano Salata, Giulia Simeone; PhD candidates: Giulia Pasetti; Technical staff: Paolo Dilda, Carmelo Di Rosa, Fabio Manfredini; Interns: Lisanna Bassi, Lina Margarita, Urzola Ceballos, Huang Feiran, Federico Ferrari, Michele Ferretti, Denis Gervasoni, Stephanie Paola Garcia Martinez, Daniela Miceli, Giulia Rotondo, Stefano Saloriani, Melania Troletti, Gabriele Venditti.

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Research Unit of the IUAV University of Venice coordinated by Professor Luciano Vettoretto, Department of Design and Planning in Complex Environments (DPPAC). Academic staff: Laura Fregolent, Francesco Gastaldi, Francesca Gelli, Carla Tedesco, Luciano Vettoretto; Research fellows/post-doctoral researchers/research assistants: Marco Bottaro, Ylenia Bristot, Denis Martinella, Stefano Pilotto, Andrea Stefani, Marco Vani; PhD candidates: Matteo Basso.

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Research Unit of the Sapienza University of Rome coordinated by Professor Carlo Cellamare, Department of Civil, Constructional and Environmental Engineering (DICEA). Academic staff: Giovanni Attili, Giovanni Caudo (Roma Tre University), Carlo Cellamare, Pierluigi Cervelli, Roberto De Angelis, Lidia Decandia (University of Sassari, team coordinator), Maria Immacolata Macioti, Enzo Scandurra; Research fellows/post-doctoral researchers/research assistants: Cristian Cannaos (University of Sassari), Dario Colozza, Alessandro Coppola (Roma Tre University), Elena Maranghi, Alessandra Mascitelli, Monica Postiglione, Irene Ranaldi, Federico Scarpelli; PhD candidates: Antonella Carrano, Leonardo Lutzoni (University of Sassari), Francesco Montillo, Nicola Vazzoler (Roma Tre University); Interns: Roberta Proietti; ISPRA Staff: Michele Munafo.

Research Unit of the University of Naples Federico II coordinated by Professor Giovanni Laino, Department of Architecture (DiARC). Academic staff: Fabio Amato (L'Orientale University of Naples), Daniela De Leo (Sapienza University of Rome), Paola De Vivo, Giovanni Laino, Laura Lieto, Fabrizio Mangoni di Santo Stefano, Maria Federica Palestino; Research fellows/post-doctoral researchers/research assistants: Claudia Avolio, Dino D'Argenio, Alessandra Esposito, Daniela Mello, Luca Mannunza, Alice Palestino, Rosa Romano, Saverio Sodano.

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Research Unit of the University of Eastern Piedmont coordinated by Professor Paolo Perulli, Department of Law and Political, Economic and Social Sciences; Academic staff: Paolo Perulli; Research fellows/post-doctoral researchers/research assistants: Luca Garavaglia, Daniele Pennati.

In parallel, research teams of the Politecnico di Bari (coordinated by Professor Nicola Martinelli), University of Bologna (coordinated by Professor Valentina Orioli) and University of Genoa (coordinated by Professor Roberto Bobbio), who have embraced the overall methodology and research purposes, providing their contribution to extend the Atlante dei territori post-metropolitani to these territories.

Recent research coordinated by Balducci (see Textbox 2 and other experiences quoted within the interviews) has contributed in the recognition mentioned by Clementi, presenting the Italian case as a fertile context in which to reflect on these issues. For Balducci, the terminology used in the international debate (post-metropolis, regional urbanization, etc.) represents both a useful tool and a rigid device that requires specific adaptation. In fact, his research seeks to test these ideas in different Italian cities, and his recent reflections represent one of the most relevant contributions to national debates about urban planning.

The pervasive dimension of "contemporary urban" emerges in the territorial descriptions of Soja (post-metropolis) and Brenner (planetary urbanization), where several different processes, dynamics, and rhythms co-exist in urban regions. Together, these seems "unbound" (Soja, 2011b, p. 462) from spatial and temporal continuities. The result is a space where differences persist while, at the same time, new convergences occur.

Consolidated planning concepts and tools are unable to explain the heterogeneous and rich nature of urban regions/post-metropolitan spaces, because they were conceived to describe another kind of city, based on metropolitan logic. Within Balducci's work a strong will emerges to provide planning as a discipline with a new narrative for contemporary urban environments, one that is able to explore and reveal their original meanings, their operational diagrams, and their current mutations.

TABLE 3: A DESCRIPTIVE LEXICON FOR DIFFERENT DEGREES OF URBANIZATION

Term	Definition
Rural Areas	Municipalities where more than %50 of the population lives in rural grid cells, as used in the degree of urbanisation.
Urban Area	The sum of city, towns, and suburbs.
Urban centre	A cluster of contiguous 1 km2 grid cells with a density of at least 1,500 inhabitants per km2 and a minimum population of 50,000.
City	A local administrative unit (LAU) where the majority of the population lives in an urban centre of at least 50,000 inhabitants.
Commuting zone	The zone containing the travel-to-work areas surrounding a city where at least %15 of employed residents work in the city.
Functional urban area (FUA)	A city plus its commuting zone.
Towns and suburbs	Municipalities that are not cities, and where %50 of the population lives in urban clusters, as used in the degree of urbanisation.
Metro regions	NUTS3- regions or groupings of NUTS3- regions encompassing all functional urban areas of more than 250,000 inhabitants. There are three types of metro regions: 1. Capital city regions: includes the national capital. 2. Second-tier metro regions: the largest cities in the country, excluding the capital. For this purpose, a fixed population threshold cannot be used. As a result, a natural break served the purpose of distinguishing the second tier from the smaller metro regions. 3. Smaller metro regions: all other metro regions.

Source: EU (2016): 16, 2016

Documenting the regional dimension of contemporary urban phenomena

MP: Planners need a better approach for describing the contemporary city, but the new description should move beyond consolidated images and involve original tools to provide a solid base for territorial governance and the design of future actions. Is this task relevant within your work?

AB: This is a key point, even more so because current descriptions of the city in EU and national planning documents remain anchored to conventional concepts and approaches that focus on the identification of metropolitan areas. This includes recent documents, like the 2016 EU report on the state of European cities, submitted by the EU Commission to UN Habitat. That study involved the geographical interpretation of EU territory using a grid of 1-km² cells containing demographic and socio-economic data. Although the report paid specific attention to a new definition of urban areas, it failed to produce innovative reflections on urban spaces outside of the traditional narrative and consolidated quantitative range for cities.

In Italy it is the same: we have some tentative attempts, as in the *Bando Periferie* (Peripheries Tender)[43], where metropolitan authorities can promote regenerative actions in peripheral contexts located not only in the central city, but also in its metropolitan area.

MP: Does this mean planners should focus on different dimensions/scales when discussing contemporary cities?

AB: Nowadays, several critical aspects of cities and urban life are no longer an exclusive property of central cities, yet almost all urban policies are oriented towards only these spaces. Data regarding aging rates, migrant concentrations, urban poverty, etc. show that all these factors that used to impact only central cities, are now occurring in other contexts, far from the consolidated urban cores. In-between areas, formed by small municipalities, "overwhelmed" by urbanization processes, have most critical profiles. Equipped with only a basic welfare system, municipalities are often unable to deal with the new demands of their inhabitants, often drawn from the weaker components of metropolitan population (migrants, young couples, etc.). These municipalities should be "target areas" for policies and actions, but they often are excluded due to their dimensions, their lack of power and resources, and their representativeness. The current definition of specific borders that identify urban phenomena (metropolitan areas, urban regions, etc.) is difficult and risky. We need new forms of governance and policies that can overcome these fixed limits (see Ch. 5).

MP: In these circumstances, the development of an innovative interpretative approach to the territory becomes essential. For example, several projects developed by Urb&Com Lab[44] studied the "catchment areas" of retail and service functions. Practitioners used specific, sectoral logic to select locations that combined the attraction of local populations and transit flows (of commuters, city users, tourists, etc.). The dimension of the catchment depended on: (i) power of attraction of each single function, (ii) the socio-economic and morphologic condition of each specific location and (iii) the market competition. We cannot go into detail, but the effectiveness of this approach – not bound to administrative or institutional borders, and focused instead on the actual dimension of phenomena - shows the important role of intermediate scales and discrete areas (neighbourhood, district, corridor, basin etc.) in understanding on-going spatial phenomena.

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[43] With the "Tender for the presentation of projects for the pre-planning of the Extraordinary Intervention Program for Urban Requalification and Safety in the Peripheries of Metropolitan Cities and Provincial Capitals" (DPCM 25 May 2016, GU General Series no.127 of 01-06-2016), the Italian government promoted actions in urban areas of economic and social marginality, building degradation, and a lack of services. This tender proposes an innovative approach to the urban/metropolitan dimension, because it involves the "metropolitan perimeter" of cities (Art. 3, point 3). Municipalities of metropolitan areas can be involved as partners of central cities and promote actions financed by a specific fund.

[44] Urb&Com Lab is a research laboratory of the Milan Polytechnic Department of Architecture and Urban Studies (I) coordinated by Prof L. Tamini. It is the only Italian academic structure that studies the relationships between planning and retail with a technical-scientific approach, based on urban planning, geography, and economics, and drawing heavily from education, research, and applied research. Since 1998, Urb&Com Lab has supported academic research through the technical and scientific assistance to public institutions, local governments, public agencies, and private actors in setting up strategic and design guidelines, and the Laboratory acts as service provider and consultant (more info available at: http://www.urbecom.polimi.it/).

AB: This is an interesting example; it shows the importance of the role of the narrative within the current discourse on urban and regional planning. As long as this lack of knowledge about the nature of the city persists, we cannot innovate in the field of planning. We need a more realistic view based on solid and concrete elements.

This section has addressed several doubts that affect planners in search of a new discourse on the regional dimensions of urban systems. How can they discuss new phenomena with consolidated disciplinary tools based on binary oppositions? Are planners looking for a new antithesis or should they develop new approaches to the disciplinary discourse?

As noted by Amin and Thrift (2002; 2017), a contemporary narrative about urbanized territories is not just based on new terminology, but on a different language entirely, one that is restless and curious to study the key factors of urban life in a multiscalar space (new relationships, new representations, and new resistances). This language, a sort of new semantics that is closer to the reality of everyday living practices, is a starting point in explaining the complex nature of contemporary urban regions.

To generate a discourse that is relevant from the technical point of view, as suggested by Secchi (2000) and Benevolo (1990), planners should move beyond their need for another comprehensive discourse about the city, working instead on two aspects: first, re-thinking and updating certain consolidated concepts; second, integrating this existing corpus with suitable ideas that describe original urban conditions. As such, the next section will explore emergent characteristics of current urban systems in the Lombardy region, focusing on several aspects that are difficult to explain through consolidated interpretative tools.

2.3 REGIONAL URBANIZATION PROCESSES IN THE LOMBARDY REGION

The Milan Urban Region is an area bounded by the Po River to the south, and alpine reliefs to the north. Since 19th century, the specific identity and relative homogeneity of this space were subsequently influenced by a set of transversal transformations, producing a new and original socio-economic order.

Until the 1950s, the settlement pattern of this space consisted of a diffuse warping of rural and industrial settlements, together with a layer formed by existing small and medium urban centres. As such, Lombardy has been influenced by a progressive displacement of functions to the periphery, which increased its dispersed character (Boeri et al., 1993; Clementi & Perego, 1990; Bellicini, 1989; Secchi, 1985; Turri, 1979, Sestini, 1963). Descriptive readings of this environment have noted in particular: (i.) the role of infrastructure (railways and motorways) as attractors and as the backbone of conurbations that arose along these axes; and (ii.) the decentralization of Milan, produced by internal movements and exogenous pressures, which produced a regional diffusion of urban practices and materials.
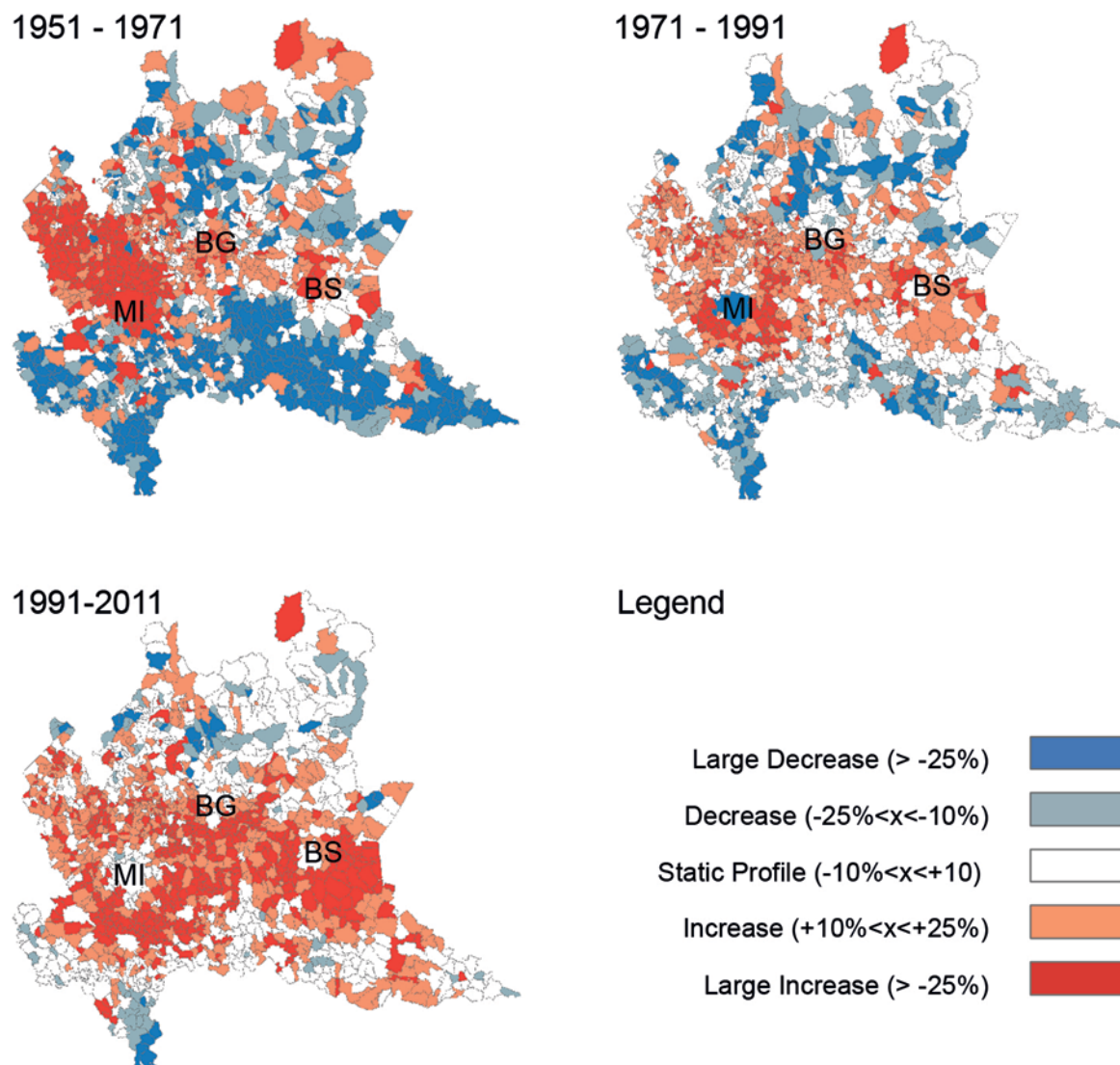
Figure 4: Demographic trends in Lombardy: 1951-2011. Source: Paris on ISTAT data census (2017).

Many scholars produced interesting interpretations of these territorial patterns, introducing the idea of a "new, integrated settlement unit" (Farinelli, 1984) to describe its morphological configuration, and describing its character as "reticular" (Dematteis, 2005; Bellicini & Ingersoll, 2001; Indovina, 1990; Bellicini, 1989; Emanuel, 1990a and 1990b). A rich body of work was generated on these transformations and their morphological, hierarchical, and spatial effects. In many cases, this approach resulted in a resigned recognition of a structural disorder and/or heterogeneity of space, which discouraged interpretative attempts. Since the middle of the 20th century, the progressive regional urbanization in Lombardy has been influenced by the growth of the three largest cities (Milan, Brescia, and Bergamo), and the interaction of these new urbanized spaces with the territorial morphology, the surrounding medium and small cities, and infrastructure.

The result is a space where different degrees of urbanity co-exist. Below, the qualitative aspects of this process are explored by focusing on the demographics of inhabitants, divided into three phases (1951-1971, 1971-1991, and 1991-2011)[45]. Remarkably, a unique character emerges for each phase, which will be explained in terms of socio-economic trends and their visible spatial traces.

TABLE 4: PHASES OF REGIONAL URBANIZATION IN LOMBARDY REGION

Phases	Settlement dynamics	Territorial drivers
1971-1951	Growth of urban population in cities	Concentration of job offers in mayor cities (Milan, Brescia and Bergamo) Increase of housing demand and parallel real estate values
	Fragmentary urbanization around cities	Progressive sprawl of families, companies, and economic functions over a larger portion of the territory
1991-1971	Population decrease in major cities and moved in first or second ring	Incremental colonization process of peripheral areas Retail, leisure, social, healthcare, and sport facilities moved from consolidated urban areas
	Economic activities moved in medium-cities and peripheral areas	Industrial districts and creating an innovative economic system based on a diffused entrepreneurial reality
	Abandonment of the countryside and mountain areas slowed down	Progressive process of modernization of rural productions
2011-1991	Regional population increases	Urbanization processes aroused between historical nuclei, in rural areas with a strong diversification in their settlement practices, and functional programs
	Stable population in main cities and decreases in medium centres	Major increases in population occurred around the medium centres that played a role as service providers in the region, as well as those municipalities located along main infrastructures

Source: Elaboration of Paris, M. (2018)

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[45] The focus has been developed starting from a focus on ISTAT data of Census 1951, 1971, 1991 and 2011 (http://dati-censimentopopolazione.istat.it/Index.aspx)

The spatial result is a "new, rescaled form of urbanized territorial organization" (Brenner & Schmid, 2014, p. 743). Portas et al. (2003) have pointed out that this environment combines the impacts of dispersive and aggregative forces, and the result is an increase in specialized tissues with mixed uses spaces, fostering new proximities with polar flows (towards consolidated centralities) and tangential mobilities (towards new agglomerates which gather functions, facilities and workspaces).

This character emerges in the adaptive transversal dimensions of the Milan Urban Region: in the northern part of the city, the process of progressive urbanization emerges in a seamless iteration of typologies (small warehouses, hybrid workshops, showrooms, etc.) and specific figures (urbanized highways, industrial areas where factories co-exist with innovative forms of production, etc.); in the southern area, an urbanized countryside merges with a productive-industrial system, in which traces of its agricultural past remain.This combination depends on the nature and the relationships created by the components defined by Lanzani (2012b) as "minimal rationalities" that transformed those spatial fragments that can be interpreted as tiles in the land mosaic described by Forman (see 2.2). In this sense, advancement in planning theory and practice depends on the ability of planners to recognise the characteristics of individual components, how they interact, ant the process of their production. But research that focuses only on these factors is not innovative[46]. However, it runs the risk of getting lost in its own descriptivism, without making any real contribution to a new, solid urban theory or to effective governance for specific urban regions, such as the MUR.

In the following pages the dialogue focuses on the results of Balducci's analyses of these combinations, beginning with his most recent work. One of the aims of his current research is to generate a new territorial narrative and an original perspective on the spatial impacts of existing territorial dynamics in order to close the gap between the *de facto* city and the *de jure* one (Calafati, 2014).

Studying the results of the re-configuration process for the MUR

MP: How can we explain current urbanized territories, their nature, and their relationships?

AB: One of the outputs of the PRIN "PostMetropolis" was a new representation of urbanized territories. This description moves beyond the image of the contemporary city as a degenerated version of the modern one, where misunderstood phenomena often became problems. Indeed, the descriptions produced point out several limits in the management of the development of these urban systems, such as the uncontrolled forms of diffused urbanization promoted by the "vicious circle" between private interests and myopic local governments. In parallel, this new form of urban development is a visible manifestation of a specific socio-economic system settled in a specific context. We had the opportunity to look at the MUR space in a phase marked by weakened real estate pressures, where the vicious circle faded. Although the current city may be dispersed, fragmented, and controversial, our task as planners is to explore the possibilities offered in the process of its transformation. So, we were motivated in our research by Soja's "optimistic" approach to the contemporary city, which suggests that these forms of urbanization are not only a problem, but also an opportunity.

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[46] See 2.1 and 2.2.

MP: Are we able, as planners, to play a relevant role in the transformation of urban regions?

AB: We can have several different roles that involve analytic and operative aspects. In the first phase of the research on post-metropolitan territories, we invested many resources into analysing the phenomena related to these new urban environments and to developing the Atlas. Using this original knowledge as support, we then considered the re-construction of urbanity within these areas and how to achieve it. This is an open field; we have just begun and do not yet have relevant results. For this reason, we proposed an extension of the research with a greater a focus on these issues.

MP: But the research has achieved other kinds of goals, including an adaptive use of existing ideas that produced an original image of the Italian and Milanese context.

AB: As I said, we re-positioned Italy and Milan within the international debate on new forms of the city, proposing our results to an international audience, with several publications and initiatives (conferences and international events, websites, etc.). We also included different points of view on re-configured urban environments, which proved quite original in the Italian context. This included the work of Brenner[47], which in turn discusses and integrates the work of Soja. Brenner's work on planetary urbanization re-frames the analysis of current transformations of the city in order to include, together with density, other conditions and factors that influence the development of the urban. When Brenner reflects on extended urbanization, he tries to be open to its different manifestations and he includes in his description all the spaces that support the everyday activities and socio-economic dynamics of urban life (from satellites to landfills, including several kinds of infrastructure and facilities). In my opinion, this work represents the correct epistemological approach to this issue because it involves a different – larger – scale, and is thus richer. A focus on the form of concentrated and sprawled urban spaces is transformed into a different approach, in which we re-think the transformation process of the whole territory, based on the changing conditions of the urban. Our inclusion of these alternative approaches in the Italian planning discourse can be considered another achievement of the PRIN. We also identified several peculiarities that characterize the Italian case. This is why we produced the Atlas, in which we propose a set of thematic focuses on cities and their urban areas, called tasselli (squares). And we activated local research units to study specific contexts in depth.

MP: What features did you identify that reveal the post-metropolitan condition of the Milan Urban Region?

AB: Of the post-metropolitan characteristics that Soja describes, my work on the Urban Region of Milan, especially in developing the Atlas of Post-metropolitan Territories[48], identified four aspects that show the on-going process of re-configuration of the urban:

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[47] Since 2000, within his works N. Brenner focused on the contemporary "urban question", reflecting on processes of planetary urbanization alone (Brenner 2000, 2005, 2013, 2014, and 2016) and together with C. Schmid (2011, 2014, and 2015)
[48] The web version of the Atlas is available at: http://www.postmetropoli.it/atlante/

A changing density of inhabitants and activities. During recent decades, the regional urbanization processes in Lombardy have involved increasingly larger areas, extending beyond the municipalities closest to Milan and other major cities (Bergamo, Brescia, and, later, Monza) to include spaces that were formerly rural or without a clear use (the hinterland of Pavia, pre-alpine valleys, etc.), all of which became part of a complex and articulated urban system.

Inhabitants of the MUR acquired urban lifestyles. As recently as thirty years ago, the "urban way of life"[49] was a critical distinguishing factor of city dwellers, whereas growing up in the countryside exposed people to radically different experiences and living practices, anchored to local contexts (i.e. people who were from Gorgonzola would also study in Gorgonzola, shop in Gorgonzola, go out in Gorgonzola, etc.). Nowadays, the differences between Milan and its peripheral areas are less marked, thanks to the development of networks in which physical (mobility) and digital (social networks and IT) infrastructure support the homogenization of lifestyles and the diffusion of urban lifestyles throughout the expanded urban regions.

The homogenization of densities and lifestyles in the Milan Urban Region influences the socio-economic conditions of its populations. When comparing the municipalities of Milan and other municipalities, we found that previous differences in terms of GDP, presence of migrants, aging rates, family size, had decreased or even disappeared in the last twenty years. The richest and poorest populations no longer reside only in the central city, but have colonized peripheral areas, in different ways.

The emergence of a polynuclear pattern, in which consolidated "central places" a key role (the historical centres of Milan and other large cities, the medium cities that are service providers for surrounding territories, and small nuclei within territories isolated by specific geographical conditions). The development of alternative centralities in areas that have traditionally been considered "peripheral" from a spatial, hierarchical, and functional point of view is a critical issue that needs to be reframed. It is interesting that Soja's ideas, developed in a radically different context from a social and geographical point of view, motivated our research on the Italian situation, pointing out differences and similarities. The key role of Milan in this research brought several "post-metropolitan characteristics" to light.

[49] Wirth, L. (1938) *Urbanism as a way of life*, The American journal of sociology, 44(1): 1-24.

MP: What are the main conclusions you have drawn from those results?

AB: After all our studies, we realized that "post-metropolis" is not only a useful pretext for the study of metropolitan regions like Milan, but also for other kind of situations, like the central area of Veneto, or territories that are less metropolitan and more "reticular" or "radically plural"[50]. This concept is therefore useful in describing the networks of cities that produce symbiotic, mutual relationships. In this respect, we follow the example set by Hall regarding mega-city regions in Europe. He describes emergent city-regions are new forms of cities, constituted by a "series of anything between 10 and 50 cities and towns, physically separate but functionally networked, clustered around one or more larger central cities, and drawing enormous economic strength from a new functional division of labour"[51]. In these areas, the local labour market and internal domestic demand (for goods and services) co-exist with global flows based on the connection with digital and physical networks (high-speed and high-capacity trains, national and transnational corridors, etc.). The combination of these two factors influence the configuration of the most interesting areas, which contain "basins" of populations and that compete at a global level.

MP: But does the Milan Urban Region present these characteristics or is it just part of a mega-city region?

AB: In Italy, the triangle composed by Turin, Venice, and Bologna, with a population of almost 30 million inhabitants, fits within the definition proposed by Hall and Pain for other EU mega city-regions[52]. The area is not comprised of a single centre and its periphery; it is the product of a combination of different urban settlements with global and continental flows. Within the MUR, medium cities like Bergamo, Brescia, Novara, Pavia, Piacenza, and Lecco show a consolidated identity and internal dynamism. Scattered within this environment, we found specialized services and enclaves.

We analysed demography and socio-economic trends in the MUR and found that certain dynamics (such as population decreases in Milan municipalities from the 1970s on, and the concomitant population increases in municipalities located its first and, later, second peripheral crowns) cannot be explained without considering all these phenomena. We also found that these transformations don't rely only on the movements of the original population of the central city. They are the result of a combination of two drivers: on one hand, the propulsive or centripetal power of medium centres (especially those located in the northern part of the Province of Milan and in the southern pole of Lodi); on the other hand, the centrifugal effect of the city (and its closest outskirts). A focus on accessibility and infrastructure also showed an increase of mobility in the Milan Urban Region, especially for non-systematic movement[53].

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[50] Fregolent, L., Vettoretto, L. (2017) Spazi metropolitani e post-metropolitani nel Veneto contemporaneo. In: Balducci, A., Fedeli, V. & Curci, F. (eds.) (2017a) Oltre la metropoli. L'urbanizzazione regionale in Italia. Milan, I: Guerini e Associati, p. 100.

[51] Hall, P., Pain, K. (2006) The polycentric metropolis. Learning from mega-city regions in Europe. London, UK: Earthscan, p. 3.

[52] Eight MCRs were studied: South East England (UK), the Randstad (NL), Central Belgium (B), Rhine Ruhr (D), Rhine-Main (D), EMR Northern Switzerland (CH), the Paris Region (F), and Greater Dublin (IRL).

[53] Manfredini, F., Pucci, P. & Tagliolato, P. (2013) Mobile phone network data: New sources for urban studies? In: Borruso, G. et al. (eds.) (2013) Geographic information analysis for sustainable development and economic planning: new technologies. Hershey, PA: IGI Global, p. 118.

The final image that emerges of the Milan Urban Region shows a fragmented and varied environment, where settlements developed following sectoral, individual, and shared logics, and pressures configure a heterogeneous habitat for contemporary Milanese populations. Within this framework, territorial narratives and spatial analyses based more on networks and relationships than on borders are essential in developing a new urban theory, one that is able to support original projects and actions, and to deal with current urban questions (Balducci et al., 2017d). For this reason, it is important to develop an intermediate view that can "retain and exhibit peculiar characteristics of contemporary settled spaces" (Bonfantini, 2017, p. 77). For this reason, the following chapters will focus on the current re-configurations of the urban in the Milan Urban Region and its polycentric pattern, and on the challenging role that agents (planners, academic, policy makers) play within these processes. This will produce an original and more accurate description of the Region's status and of the group of actors involved in current transformations. In this phase, geographic and statistical descriptions become a support for reflecting about socio-economic and political fields through an assessment of their spatial dimensions. Moreover, thorough a deeper understanding of the complex, multiscalar, and sometimes contradictory nature of these dynamics, is becomes possible to address issues of governance and other challenges that urban regions are currently facing.

Therefore, the example of the MUR shows the relevance of and need for cooperation between the different people practicing new and rescaled urbanized systems. Different roles (the academic researcher, the policy maker, the planner) interact to produce original descriptions of specific spaces, developing innovative interpretations of their condition, using this knowledge in the policy-making process and setting up specific strategies and actions. Balducci, who embodies all these roles, points out that even when just one person is dealing with this complex and multifaceted environment, the definition of linear and effective activities is not easy. Practitioners of contemporary cities must be able to rely on to creative approaches and solid backgrounds in order to address current challenges and issues.

3.   THE INCREASING COMPLEXITY OF THE POST-METROPOLITAN PATTERN

Peripheral urbanization and the growth of outer cities has been noted for decades – it has been an integral part of the urban restructuring process generated by the urban crises of the 1960s – but we still know very little of its dynamics; too many scholars refuse to recognize the magnitude and transformative significance of the changes taking place, and still cling to the old and declining metropolitan model and mentality. (Soja, 2015, p. 375)

Changes in the spatial distribution of Lombardy's population show how a progressive and incremental diffusion of urban materials, populations, and functions over larger and larger areas has produced urban forms where new and consolidated hierarchies co-exist (Indovina, 1990). In this framework, specific functions (retail, services, leisure, culture, etc.) play a relevant role and become the generative driver of original patterns that influence social and economic transformations. Often, the impacts of these changes achieve a regional scale.

In the following pages we will expand on the foregoing discussions with Balducci. After a brief description the recent evolution of the Milan Urban Region (3.1), we focus on a specific aspect of this original pattern: its "intrinsic polycentrism" (3.2). Section 3.3 explores the kinds of centralities that have emerged, focusing on those that cause epistemological difficulties for consolidated planning approaches. The final section discusses the urbanity of these places (3.4). The dialogue focuses on the role of different kinds of central spaces in urbanized regions, and how they represent a strategic element for urban and regional planning.

3.1   *COMPLEX TERRITORIES CHARACTERISED BY CO-EXISTENCE AND MUTUAL RELATIONSHIPS*

The current formation of cities exceeds the dichotomy of extended and concentrated urbanization, and entails a set of parallel and integrated processes: the densification of inter-metropolitan networks, the transformation of traditional "hinterlands", new forms of extensive soil exploitation related to resource extraction, the activation of rural areas, and the operationalization of erstwhile 'wilderness' spaces (Brenner & Schmid, 2015, pp. 152-153). According to Brenner, concentrated urbanization involves all the urban environments produced by contemporary socio-economic conditions, territorial formations, and socio-metabolic transformations around the world (ibid, 152), without distinction according to density. Therefore, per one of the key features of Soja's definition of the post-metropolis (2011b, p. 460), population density is no longer a prerogative of central cities (see Ch. 2), with the density of urbanized territories flattening out and extending sideways, and a growing convergence between urban and suburban environments (Balducci et al., 2017, p. 42).

Beyond this quantitative parameter, the diffusion of urban inhabitants colonizing a series of different spaces also coincides with the spread of urban living practices. This process of flattening and spreading becomes clearer when population growth rates are considered alongside other parameters like dependency ratio, median age, and labour force participation.

The current complexity, which Lefebvre (1970) foresaw in the early stages of urban transformation, is more than a morphological facet: it affects social profiles, economic vocations, and local territorialities. It influences the relationships among inhabitants and those components defined by their spatial practices. Several scholars have explored the nature and impacts of this new kind of city. Therefore, planners should take into account the multiscalar and fragmented structure of urbanized territories, with varying degrees of urbanity and intensity.

Together with settlement practices of inhabitants and the movements of commuters/city users, the role played by companies and the services sector (for people and businesses) indicate new kinds of relationships: between consolidated and recently urbanized spaces, and between different areas of the urban region, where the peripheral condition depends on non-positional variables. As such, analysis of the MUR must consider the three aspects of the "Edge city" established by Garreau (1991). Nevertheless, the goal is not to define Lombardy as an Edge city, but to use Garreau's concepts to discuss the on-going processes in this region and their evolution.

Suburbanization

Garreau defines "suburbanization" as the development of residential suburban edges of a consolidated city, based on the movement of the middle class and private transportation. In Lombardy, this process is based on a pattern of settlement strategies based on subjective opportunism vis-à-vis real estate trends, where the maximization of revenues prompted the colonization of spaces with lower land values. Figure 6 depicts a settlement pattern where existing nebula of small and medium urban nuclei co-exist with a new reticular, continuous structure of urbanized spaces.The result is a complex system, which melds previously isolated settlements in a sprawling urbanized space. The transformation that has occurred between 1951 and 2011[54] is extraordinary.

The Milan Urban Region involved a large part of Lombardy and grew along consolidated and recent infrastructure (motorways, railways, etc.) creating a continuous urban system, which contains significant differences in terms of accessibility, density, intensity, and land values. A sort of extended and fragmented urban tissue. This urban organism has discontinuities along the motorway to Bergamo and Brescia, where industrial, productive, and service functions are concentrated, co-existing with rural spaces that disappear closer to major urban centres.

[54] The map, developed during the doctoral research of Paris, contains the overlay of two areas obtained by the interpolation of the urban population values for every municipality of the region (ISTAT census 1951 and 2011) and refined with a coefficient based on the density of urban tissues).
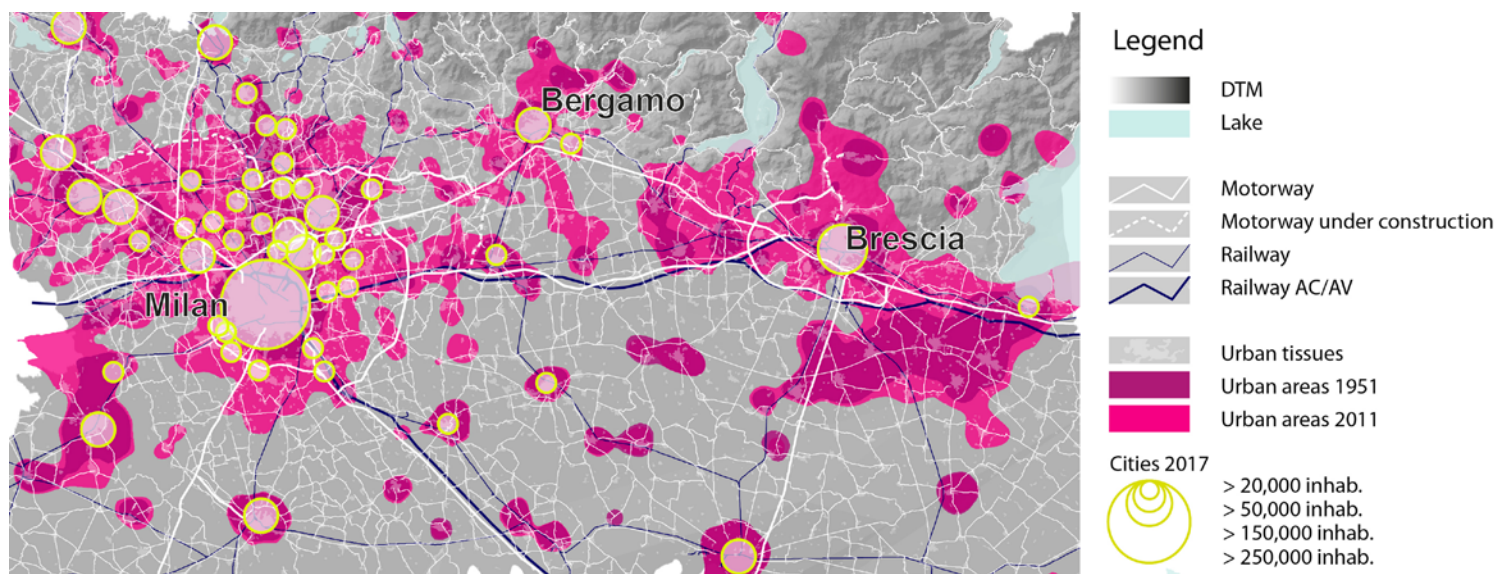
Figure 5. Suburbanization in MUR core area. Source: Paris (2017).

Together with a denser layer, based on older urbanized spaces, there is a second area, containing a mixture of agro-industrial spaces and lower density urbanized areas. In this space, the result of recent urbanization processes, medium-sized centres have multiplied just as in southern Bergamo province and in the area between Brescia and Lake Garda. In recent decades, this layer, together with the previous one, have generated a polycentric pattern where – contrary to Garreau's definition – the suburbanization process in Lombardy represents a real colonization of the rural space and the creation of an urban region characterised by mixed uses and a complex overlay of densities and intensities.

Mallification

Another phenomenon related to the "mallification" identified by Garreau is the "twist" (Jackson, 1985, p. 64) of retail and leisure-culture functions that typically belong to urban cores, in alternative locations, sprawled along infrastructure and in formerly rural spaces. In Lombardy, this trend began in 1998, when national deregulation prompted the multiplication of new shopping malls and retail big-box stores outside of major cities. This process led to the formation of a multichannel regional system (Limonta & Paris, 2017a) where different formats and operators offered a variety of consumption experiences, from traditionally attractive spaces (high streets and local retail aggregates) to new retail poles.

The spatial distribution[55] of retail and leisure-culture functions in Lombardy depicts how the spatial distribution of those functions has a close relationship with the shift of inhabitants across ever-larger territories. At the same time, it demonstrates how these spaces influence living practices in the post-metropolis, and how they sometimes become new "destinations", able to attract users and influence socio-economic processes within the urban region. A focus on the nature and the functioning of these spaces provides input for a reflection on their spatial impacts and relevance to the current territorial agenda.

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[55] A map of these functions has been drawn up by identifying all the elements of the region belonging to three different areas:
- Retail: major shopping malls with vending surface > 10,000 m2 (Regione Lombardia, 2016), future major shopping malls, with GLA > 15,000 m2 (Infocommercio.it, 2016), retail parks with GLA > 15,000 m2 (Infocommercio.it, 2014), big-box stores, GLA > 5000 m2 (Regione Lombardia, 2016), cash and carry stores (Infocommercio.it, 2014), and factory outlets (Infocommercio.it, 2016).
- Culture: cultural hubs (Theatres, Archives, Libraries) recognized by regional or national governments (Regione Lombardia, 2011), UNESCO World Heritage Sites (UNESCO, 2018), and fair and exhibition centres (Regione Lombardia).
- Leisure-Entertainment: sport facilities, > 4000 sites (Regione Lombardia, 2016), multiplexes (Infocommercio.it, 2014), and theme parks (Parksmania.it, 2016).
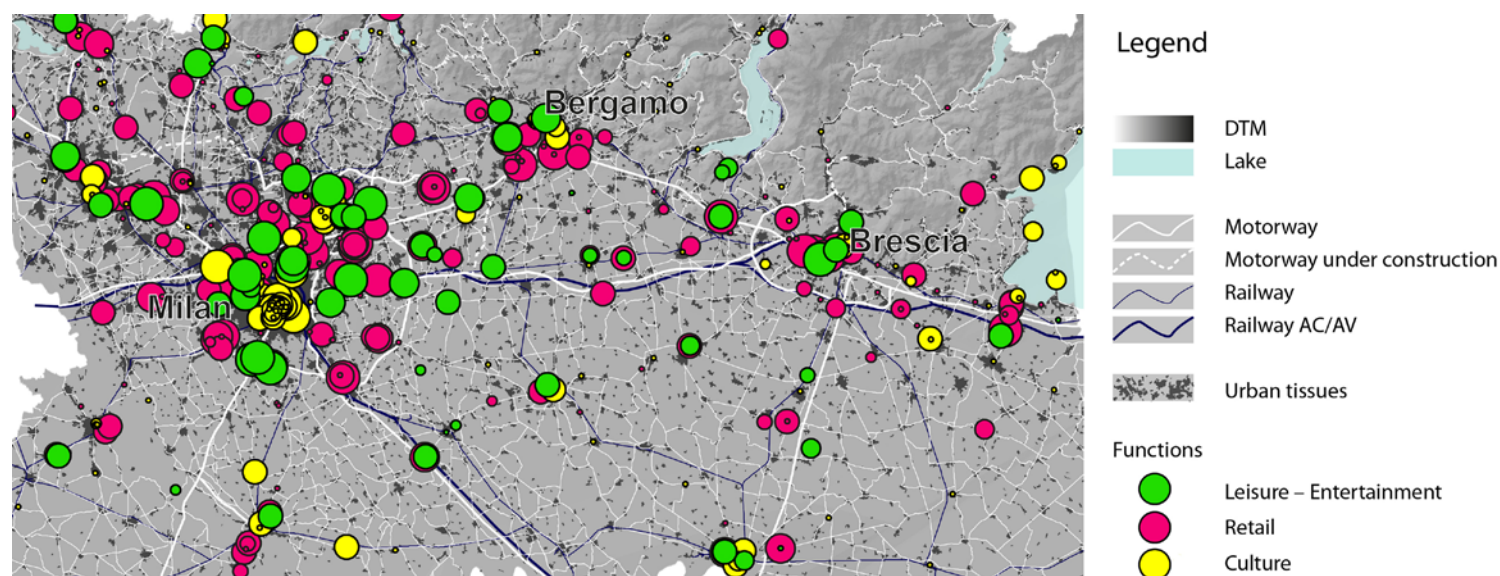
Figure 6. Retail, Culture, and Leisure-entertainment functions in MUR core area. Source: Paris (2017).

Tertiarization

The tertiarization of regional space points out the radical transformation of Lombardy. The diffusion of the service economy brings to a shift from an industrial and rural labour market to one based on specialized professions and companies that support innovative and competitive business. This observation does not merely arise from a myopic application of Garreau's approach, rather the data show a radical transformation of the MUR and its consolidated, productive vocations in something else: employment rates. In different sectors of Lombardy's municipalities, employment rates have changed over time, indicating a new socio-economic arrangement in the region.

The data[56] indicates a radical increase of employment in the services sector across the region. At the same time, the dispersion of values for urban areas (1st and 2nd urban peripheries) and for overlapping territories shows a maturity of the process in these territories, where the periphery follows the trends set by the central metropolitan cores. Although Lombardy represents one of the most important food production spaces in northern Italy, agriculture as the predominant sector has disappeared across the region, and today is confined to some southern edges of the Po valley. The southern area maintains a mixed character, and none of the three activities predominates (occupying more than 50% of employed people). For this reason, the role of agriculture is still important in these spaces. Meanwhile, the services sector predominates in several specific areas that are well connected and used as transit points for the region.

In the north, the transformation process has changed the former rural profile of the alpine sector of Lombardy, and today the development of sport facilities and the marketing of winter sports, tourism has become an important economic activity for the local population, together with traditional industrial production and existing economic sectors.

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[56] ISTAT data were processed, classifying all the municipalities in the region. When more than 50% of employed people work in a particular sector (agriculture, industry, or services), the municipality is colour-coded. The final image is obtained by the superposition of census data from 1971, 1991, and 2011.
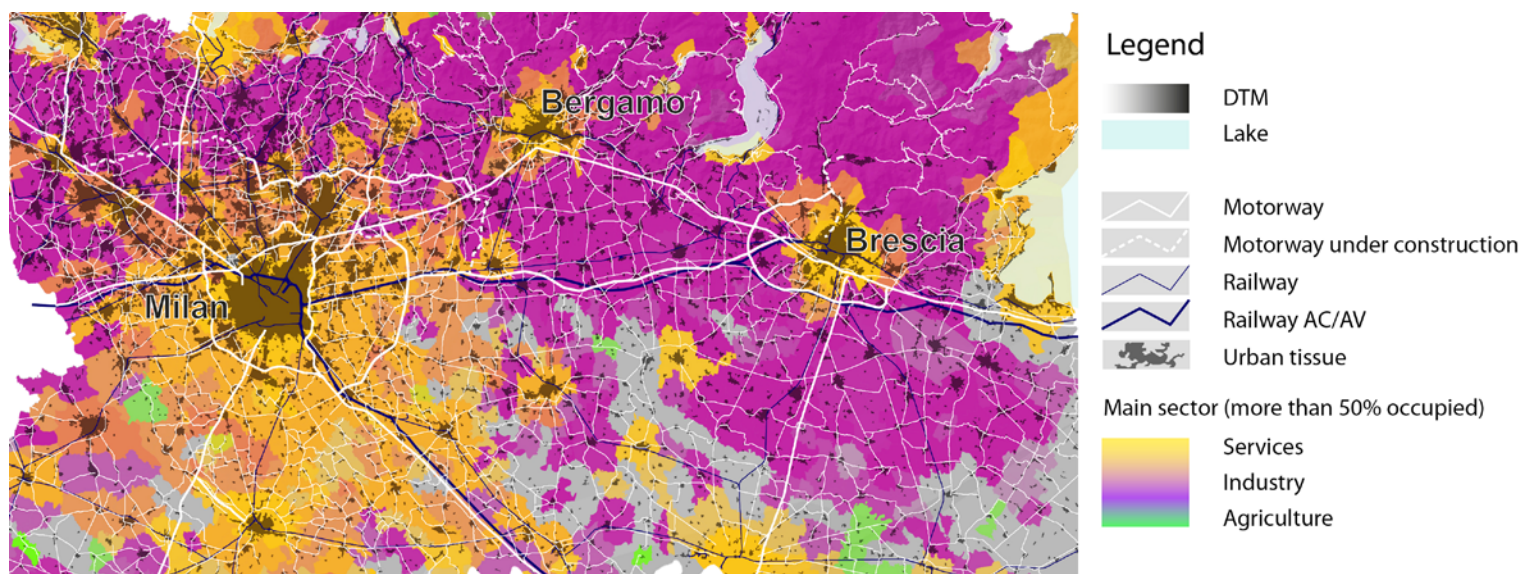
Figure 7. Transformation of the regional economy in MUR core area. Source: Paris (2017).

Garofoli (2016, 2017) describes the current situation of the MUR as an ambiguous framework that produced a "poor metropolisation" (2016, p. 36). Eschewing the hyper-positive narrative about Milan, he notes how the data describe a progressive weakening of the socio-economic autonomy of peripheral areas of the region, where the extension of urbanized spaces implicates the enlargement – in spatial terms – of the economic system of the Milan Urban Region. This space involves several provinces, and sometimes, as in case of Novara and Piacenza, overtakes regional borders.

Together with Balducci's recent work on the Milan Urban Region, the aforementioned research of Garreau and Garofoli show how this space is characterised by simultaneous processes, dynamics, rhythms, and fragmented structures. In this environment, volatility arises (Balducci et al., 2017a, p. 14), one of the peculiar characters of post-metropolis, and influences a specific "model of urban growth and change" (Soja, 2011b, p. 459).

One commonality that arises among authors focusing on a specific factor of the complex post-metropolis is the idea of "centrality" as spatial characteristic, a hierarchical factor, and as a territorial value. This reinterpretation of existing concepts and paradigms (centre-periphery) contributes to the re-signification current territories in planning discourse and the re-construction of a contemporary narrative in urban studies that overcomes the descriptive impasse produced by out-dated approaches.

Below, we further explore the relevance of centrality in the study of the current urban structure and how it can be used to unpack existing specialized aggregates within the reticular pattern (Lanzani, 1991, p. 151) of urbanized regions.

3.2 POLYCENTRIC PATTERNS: FROM CENTRES TO CENTRAL PLACES

When presenting the plan for the Province of Milan "Città di città" ("City of cities"), which Balducci coordinated in 2004-2009, he underlined the reticular pattern of the Milan Urban Region (2004). He recognized that the MUR is a highly urbanized and integrated territory that occupies an area extending from the mountains in the north to the Pianura padana in the south, and from Novara in the east to Bergamo in the west. A plurality of local systems and settlement environments compose the space. This is the territory of the contemporary city, and it is only at this scale that a series of challenges can be faced, such as mobility and transport, the creation of a shared vision for the space, and new technologies to support better use of existing infrastructure. Balducci noted that urban regions had already overcome the old vision of the neatly polycentric region based on traditional urban hubs, and had adopted a mobile geography based on the integration of traditional centres and new "central places", spaces characterised by centrality even they are not "central" in geometric or geographical terms.

Over the last several decades, the challenges and advantages generated by contemporary actions in different areas (the consolidating city, rural land) have caused the simultaneous centrifugal and attractive forces that act upon private stakeholders. Within urbanized territories, public and private actors follow different settlement strategies that go beyond the topologic logic of metropolitan growth (Rufì, 2003), colonizing many voids. As noted in previous studies (Paris, 2014, 2013a, 2013b), these movements involved inhabitants and other functions, which led to the loss of the central value of the consolidated city, and the rise of new, alternative forms, first in the modern periphery and later, sprawled through the voids of the metapolis (Ascher; 1995). Traditional centres are no longer the only geometric-physical, functional, and symbolic spaces of the city; new centralities have arisen, with different accessibility, vocations, and relationships with local contexts.

Together with the existing centres, the new layer formed by these locations creates an alternative pattern, based on the new temporalities and mobilities of the urban way of life of contemporary society, where the different elements of the system generate a renewed distribution of positional values. This trend follows global drivers related to non-traditional processes of production/distribution/consumption (Taylor, 2004, 2001) that, when supported by physical or digital networks, produce parallel phenomena, where the shift of central functions (Christaller, 1933, 1964, and 1972; Aurousseau, 1921) in urban regions produce original spatial configurations.

Many researchers have conducted a meta-studies on Christaller's work (Dale & Sjøholt 2007; Parr, 2002; Shearmur & Doloreux, 2015), including most recently Van Meeteren and Poorthuis (2018, p. 129), who define a central function (a good or service) as a social activity that is procured at a central point (place) and for which the consumer has to bear the costs to reach that point. Bozzuto (2011, p. 167), discussing the Milan Urban Region, suggested that the spaces that gather these functions offer services, functions, and an interactive potential (with a variety of urban populations) that can be compared with traditional urban centres. This transversal, often episodic and original condition has contributed to the re-definition of several kinds of value for the whole urban region.

Real-estate values and relational values influence re-activation processes for complexes, neighbourhoods or urban sectors, involving private stakeholders and agents in urban operations. Often, these operations influence the geography – and its shared image – of the periphery in urban regions, producing new potential and increasing differences within a monotonous, urbanized space. According to Perulli (2009) this unique situation, with its specific geography and spatial hierarchy, forces planners to update existing approaches developed in past decades. Planners should focus more on relationships that link these attractive, intense areas with other spatial elements, and highlight their spatial role and privileged environment for the economic, social, and working life of contemporary society.

These non-central spaces that aggregate central functions, according to Indovina (2007), have characteristics related to the masses, such as concentrations of populations, services, capitals, goods, and flows, and related to power, such as concentrations of specialized and innovative functions, features of the "rich" urbanization process, and the provision of advanced services to people and companies. Castello (2010) considered centrality to be the main attractive power of a place for urban activities, populations, and flows. This entails intensity of activities, density of services, and the presence of different uses that make these spaces different from the rest of the city. As such, the Brazilian scholar views centrality as a dynamic process that combines socio-economic and spatial aspects. Often these centralities host tertiary functions, businesses involved with finance and knowledge, and administrative functions that play a prominent role within the territorial hierarchy. They are also hubs created through the concentration of physical (people, goods, etc.) and intangible flows (news, orders, data, decisions, social habits, trends, etc.).

This generation of new centralities not only influences morphologic aspects of the space, it "refers to the reconfiguration of different levels of the urban hierarchy" (Christaller, 1933, as cited in Hall & Pain, 2006, p. 4)" in which "lower-level service functions are dispersed out from higher-order central cities to lower-order cities" (Llewelyn Davies Planning, 1996, as cited in Hall & Pain, 2006, p. 4). Soja, too, participates in this conceptual shift by replacing exopolis (1992), implying two different spaces and the prominence of the "inside" to the "outside", with post-metropolis (2000), an original environment. This environment breaks the socio-economic logic of the metropolis, based on physical agglomeration, and involves an overlay of interplays (between public and private actors), attractions (of investments, talents, etc.) and conditions that strongly influence quality of life and forms of capital accumulation and reproduction within cities.

Amin and Thrift (2002) approach the spatial patterns of urbanized territories with a different attitude, with the focus shifting from the centre as physical space to centrality as system of values that materialize in different contexts. Already in 1968, Lefebvre had stated that central characteristics are the key to urban phenomena: produced by a dialectic movement – so, not bound to a specific space and related to its relationships – these characteristics influence the social exchanges and shared experiences that can take place in different parts of urbanized territories.

Castello (2010, p. 112) argued that a space achieves centrality when "it polarizes population and flows: the criterion therefore comprises focuses of activity, concentrations that facilitate greater plurality of activities and functions which therefore stand out in relation to the other spaces in the city". As Chapter 4 will show, this power of polarization can be related to the role of aggregated central functions that produce varied configurations of territorial organization and a significant increase in interdependencies (Memoli & Rossignolo, 2011, p. 134). These spaces contain concentrated traces of practices that offer economic and symbolic added value. These features belong not only to traditional centralities but also to technological hubs and retail spaces, as well as knowledge, research, and innovation clusters. Together with spaces for institutions, companies and business, cultural events, etc. these areas coalesce current political, social, and cultural investments. At the same time, the risk appears of standard repetition of banal architectonic solutions, the stiffening of spatial and social differences at various scales, and the progressive manifestation of exclusion. These spaces present many different interactions, between users/inhabitants/customers, between local, urban, and regional contexts, between functions, etc. including those that are unforeseen and/or unrelated to strategic and planning wills (ibid, p. 131).

The polycentric pattern of urbanized territories thus arises through the overlay of these practices, investments, and interactions. The result is a structure where relationships co-exist based on complementarity (Nel·lo, 1998), interdependence, and competition. As noted by Secchi (2000, p. 81-82), this pattern continuously destroys and re-generates positional values, which progressively homogenize and democratizes the urban space, where consolidated systems of symbolic and financial values decay and new axes of privilege and new places for retail, leisure, communication, and social interaction emerge. Overall, this new geography of central places generates new systems of intolerance, compatibility, and incompatibility. To explain this new pattern, planners must take into account the role of traditional and alternative central places at the urban and regional scale, adopting more innovative and complex viewpoints (Allione, 1967) that enrich and disrupt the linear interpretation and its spatial description of modern city, as introduced by Alonso (1967).
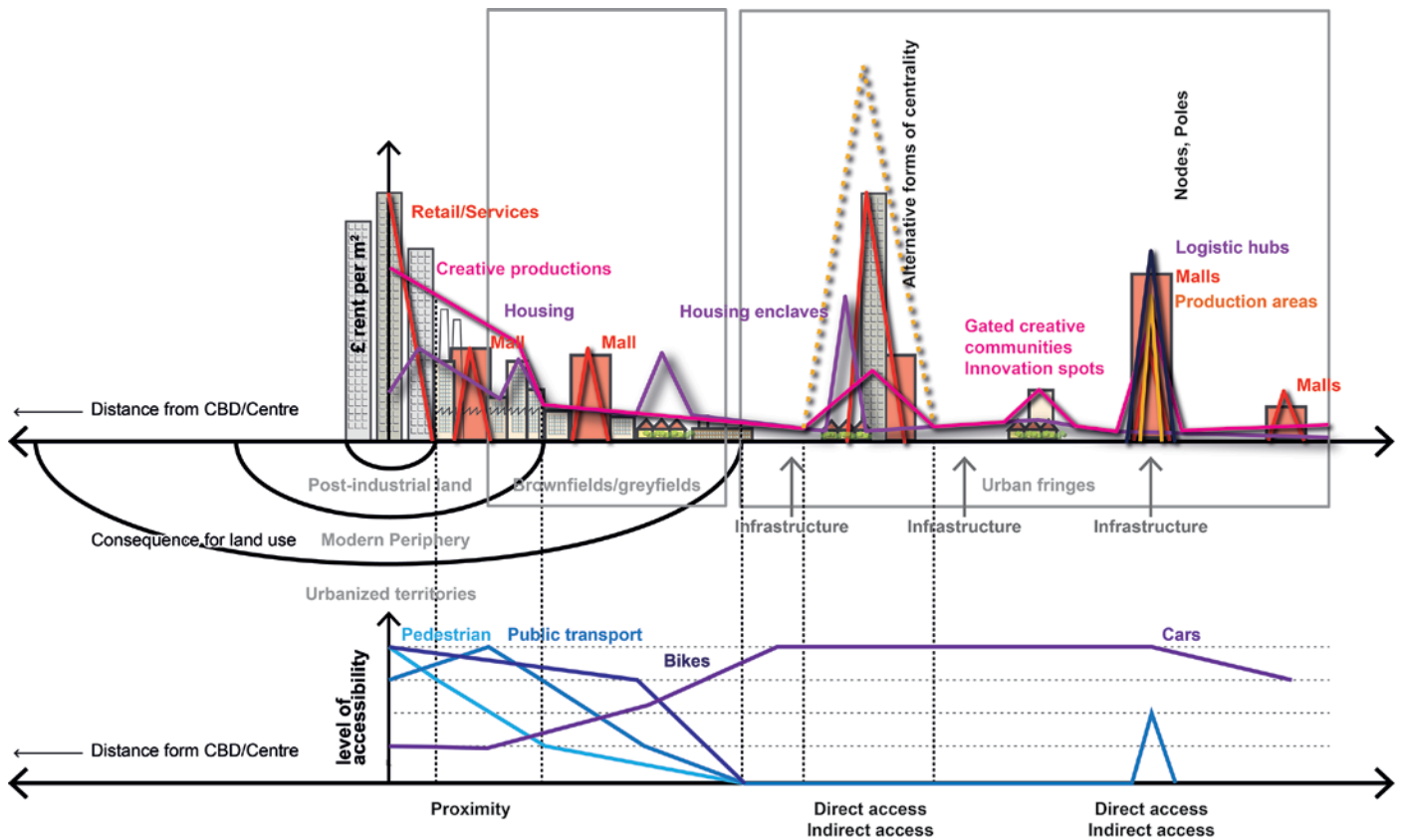
Figure 8. Reinterpreting W. Alonso approach. Source: Adapted from "De los centros urbanos consolidados a los lugares de centralidad: una propuesta metodológica para su estudio" by M. Paris, 2013a., Ciudades, 16, p. 30.

Therefore, the aim of the present section is to recognise centrality as a system of values with spatial impacts on contemporary urban regions. The study of these centralities is motivated by their double nature as a product and producer of several dynamics that generate regional urbanization, and their current role in the space (supporting the changing vocations of metropolitan edges, their tertiarization, the desertification and/or re-activation of low density contexts, etc.) and in the living practices of their users.

Territorial centralities

MP: In planning, the current condition of urbanized spaces is often described as the result of an evolutive process. Your recent work on the Milan Urban Region reveals a clear interest in the polycentric nature of this space. Consolidated settlement patterns in the Lombardy region interact with current socio-economic trends (globalization, the transformation of productive and economic systems, new forms of territoriality, etc.) and this interplay generates a spatial transformation. Do you think this is unique to the MUR or is it a transversal characteristic of urbanized territories?

AB: As I mentioned previously, during collaborations with different *Agenzie di sviluppo territoriali* (Consortiums/Agencies for territorial development), I had the opportunity to work with different kinds of centralities, understood as municipalities or spaces able to provide a set of services and/or functions to a larger context. This issue, in my opinion, is a key opportunity to better explore the structure of new urbanized territories. In Europe, we look to American cities that present similar patterns as precedents, but we can work by comparison, not by resemblance. Urbanized territories in the EU present a network of pre-existing centralities that represent their "backbone". In addition, new centralities, such as the ones that you describe in your maps related to retail, leisure, services, etc., have appeared over the years. Looking at the Milan Urban Region, we see an evolution of these forms of centrality, in terms of dimension, functional program, and location.

MP: This evolution is based on several different factors that affect the spatial and economic conditions that enabled the growth of alternative centralities, as well as the strategies of the private actors involved in their development and the behaviours of their potential users/customers/inhabitants. Do you perceive a different approach to this issue in the field of urban planning?

AB: Within urban planning, as a discipline, there is indeed a change in the approach to these spaces. In her speech during the 2017 SIU conference[57], A. Masboungi pointed out that several national regulations, including the UK, were leaning towards improving or reinforcing existing centralities more than developing new ones. She mentioned the case of Bristol, and it seems that other countries are also engaging in this process. By contrast, in Italy we are in a different phase, in which the normative and policy communities have only just started to take these phenomena into consideration.

MP: What kinds of centralities have you recognized in the Milan Urban Region?

AB: I think that we are facing a sort of parallelism between scales:
- In the city of Milan, there is a central area – larger than the historical core, but spatially defined that is symbolically and strategically attractive due to its accessibility, environmental qualities, etc. At the same time, there are some functional aggregates, located in areas that have been historically peripheral but that nowadays are innovative spaces, that contribute to the transformation of the whole city. I am referring to Bicocca, Bovisa, the IULM campus, the Smart triangle at the Porta Romana, the Expo site, etc. These spaces contain universities and other relevant public functions but, in some cases, these were established thanks to the initiative of a single stakeholder or private actor.

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[57] Masboungi contributed to the plenary section *"Fare molto con molto poco. Soggetti, progetti ed esiti dell'azione pubblica"*, within the XX Conferenza Nazionale SIU, entitled "*Urbanistica è/e azione pubblica. La responsabilità della proposta*", helded in Rome in June, 12-14, 2017.

- In the whole Urban Region, Milan may keep acting as main attractive pole, but we also have another set of centralities, based on two typologies. First, we have the significant role played by consolidated central areas of medium cities (Bergamo, Brescia, Monza, Varese, Como, Pavia, Mantova, etc.) and all the small towns that historically formed the polycentric pattern of the Region. Second, there are specialized centralities based on key functions, such as large hospitals (IFOM, IEO, Ospedale Papa Giovanni XXIII), research centres (both university and private research centres, such as the Kilometro rosso), and shopping malls (Centro Arese, OrioCenter, Elnos, Milanofiori, etc.). All together, these centralities become an interesting backbone for the Milan Urban Region, and a focus on their quality – and the possible qualification of their spaces – could be very interesting from a planner's point of view. The Milan Expo 2015 is another example of this process. Located outside of the consolidated city, on the north-west axis from Milan to Turin, it created a new, temporal destination for the inhabitants of the Urban Region (and probably of a larger area) during a limited time. Depending on what happens with post-expo projects, this area could resume this role in the future.

MP: In my research on alternative forms of centralities, I sought to understand the spatial distribution of centrality in the MUR by avoiding value judgments, focusing instead on spatial dynamics. This means that one of my aims has been to explore the whole set of relationships that link these centralities. Several qualitative analyses of the system showed that the competition between traditional and alternative forms of centralities is a theoretical antithesis more than a real one. Users develop complex living practices within urbanized regions and often link these spaces, producing an integrated, original, and sometimes surprising geography of their everyday experiences. In my opinion, we should move beyond the competition-based approach to these different forms of central spaces (traditional and alternative) and re-think our understanding of urbanized regions starting from the spatial distribution of the system. In the Milan Urban Region, all these different examples form a catalogue of situations and processes that take place in a variety of contexts; from the modern periphery of the city to suburban crossroads, from spaces identified in planning as potential poles for a larger territory, to spontaneous aggregations of innovative and traditional functions.

AB: In the Milan Urban Region, we see the post-metropolitan disconnect between administrative borders and spatial distribution of social, economic, environmental, and political processes. As Brenner and Soja have noted, urbanized territories are the result of a progressive process of dissolution of traditional geographies, relationships, and hierarchies and a parallel formation of new ones. Therefore, this transformed space needs a planner's double effort. In their analyses they should involve a trans-scalar, fluid approach that is closer to current spatial dynamics and aimed at recognizing the potential and limits of this environment. They should also take into account the need for plural and dynamic citizenship that this arrangement of the space imposes, and new governance issues. This is the MUR: a new reality that tends to produce original conditions of urbanity, based on isotopic spaces and a polycentric pattern[58]. In this sense, the expression "polycentric post-metropolis" is an iterative circumlocution, because this system is intrinsically polycentric and polynuclear.

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[58] Balducci, A., Fedeli, V. & Curci, F. (eds.) (2017a) Oltre la metropoli. L'urbanizzazione regionale in Italia. Milan, I: Guerini e Associati, p. 61.

In planning, when the traditional narrative is not able to produce a solid explanation of current urban phenomena, the centrality – whether traditional historical cores and CBDs or new central places – becomes a key element in the process of re-thinking the meaning of this socio-economic and spatial reality. Within a needed process of re-signification of contemporary urban environments (Lanzani, 1991, p. 155), the practices and symbolic relevance of central places represent a prominent issue for planners. They should explore new forms of analysis and actions that take into account the unique urbanity that animates these spaces and their role as activators for their contexts at different scales.

3.3 URBANITY AS A KEY

In 1968, H. Lefebvre developed one of the most interesting contributions to urban studies on centrality, introducing the idea of the complex urban pattern and discussing the 'different and renewed kinds of centralities' (Lefebvre, 1968: 90) of industrial cities. Lefebvre (1968) described 'centrality' as an essential element of urban phenomena and underlined that this aspect is not a static feature, but one that changes over time, creating new opportunities and dynamics. This characteristic is shared by all places that are able to disturb and re-organize the fragmented banality of current urbanized territories.

As pointed out in the previous section, centrality can be both a container (a definite area) and a value, deriving from the qualities of the space, the interaction between hosted functions, and the practices that are imposed, stimulated or allowed there. Lefebvre (1970) underlined this duality, where centrality is composed of multiple, juxtaposed, overlapped, and accumulated objects, but also of the multitudes of people who live in these spaces. Balducci et al. (2017a, p. 21) state that this process is one of the most visible sides of the new epiphenomena that characterise contemporary urban spaces. The issue of the production of spaces of urbanity "can be productively understood as a transformative potential that is constantly generated through processes of urbanization" (Brenner & Schmid, 2015, p. 176) and it contributes to the varied differentiation that characterizes urbanized territories. As such, one of the key questions explored in recent research on centralities (Morandi & Paris, 2015a, 2013; Paris, 2013a, 2013b) is their role as places in their post-metropolitan contexts and, especially, their identity spaces of urbanity for these territories. As noted in Textbox 3, urbanity does not depend on the space, its morphology or (as showed by the PRIN 2010-2011 work on atlases) its density, but on the way in which its inhabitants use the space to set up living practices.

The urbanity of traditional urban agglomerations has been studied from many points of view, but the role of this factor in new forms of centrality has been poorly focused and needs to be overhauled. According to Ferrao (2003), the challenge in the urban studies field today is how to explain phenomena of urbanity in urbanized territories. Sennet (1999) has analysed the richness of the urban environment and points out that one of the key questions in urban and regional planning is how to support the interrelation among many complexities that coexist in the territory. This task is even more important because these complexities are no longer only present in defined areas, but have spread elsewhere. Indovina (1990) has remarked on the generative energy (creative stimuli) that fostered this movement. Its action within the space produced an overlay of new orders and old ones, which do not disappear, but remain and are sometimes transformed. These transformations, influenced by social, economic and technological changes, influence and are influenced at the same time by the living practices of inhabitants.

Subjected to these pressures, they change, transform and, accordingly, create location strategies. These strategies correspond to the inhabitants' needs from places, for spaces of simultaneity, of meeting, exchange, consumption, etc. (Lefebvre, 1976).

Textbox 4: About urbanity

As underlined by Boudreau (2010, in Governa & Memoli, 2011), urbanity is a dense concept, whose different meanings, shared features, and qualities concern urban lifestyle. Castells notes that urbanity is "part of a peculiar urban culture, which involves a system of values, rules, and relationships within the social field, related to definite historical contexts and a specific logic of organization and transformation" (1972, p. 106). Working on similar topics in the same period, Chapel (1975) emphasized that the whole population of western countries, from a sociological and anthropological point of view, can be considered "urban". Scholars cannot limit their analyses to the inhabitants of dense urban settlements, because the populations of entire industrialized countries now adopt behaviours, attitudes, and values systems that used to be exclusive to "city dwellers". Lefebvre (1974) identified these behaviours as a part of an ephemeral urban identity produced by the continuous movement of and interactions between subjects, produced by exchanges and ludic dispositions typical of urban populations. According to Castello (2010) urbanity is a condition of the urban environment, where a variety of lifestyles, opportunities, choices, options, exchanges, interactions, and relationships occur.

Therefore, the urbanity of a place is proportional to its power to stimulate social exchange, multicultural experiences, and all encounters that are based on contact, the discovery of or confrontation with 'different' social and cultural groups. This recalls the constitutive character of Foucault's heterotopia (1984).

In these terms, urbanity becomes the capacity or potential of a place to welcome and stimulate this exchange, this compromise (Ascher, 2001) and, in a word, this diversity within a definite space. Moreover, urbanity is a characteristic of the city that concerns not buildings or tissues, but the inhabitants' experiences of this environment and the impact these experiences have on the personality and the sensitivity of each individual (Sennett, 1999). The experience of the "urban" way of life can teach people to live together and improve as individuals.

So, what is the key to interpreting the heterogeneous diversity within urban spaces composed by complex land mosaics? It is the urbanity of certain fragments: within the intrinsic banality due to the diffusion of urban materials in the space (De las Rivas, 2013), some of these parts condense behaviours, practices, needs, and different capacities (Memoli & Rossignolo, 2011) that recall the density and the intensity of traditional centres. The similarities lie in the impact, and not on modalities, and for this reason, the urbanity produced in new central places is different, but integrated with the one of the historical central areas of the city. Some of these spaces present the same level of complexity, density, and intensity of use of consolidated ones. They become part of a shared mental map of urban places, even if they occupy space located outside traditional conurbations. This map recalls the latest studies of Lynch (in Sepe, 2013), and shows the spatial structure of the logics that drive people in their performative, everyday use of urban spaces.

A specific kind of urbanity

AB: Within the system of central spaces that we have identified, we can recognize different situations that depend on specific economic and productive processes. For example, a set of new aggregates of functions began as a re-concentration of business offices that used to occupy several venues in the city. This occurred in Milan with the regroup of the Unicredit Bank management offices in Porta Nuova, the Allianz and Generali offices in the City Life project, and Vodafone Village in via Lorenteggio. But the same process also contributed to the creation of aggregates of tertiary functions in Assago with Milanofiori, in Vimercate with le Torri Bianche, and even in the Expo area. Moving further from the city, many different aggregates related to research and innovation, retail and consumption, service provision, etc. have developed a galaxy of central places that punctuate the urbanized tissue at regional scale.

MP: We are talking about a rich variety of situations and, in several cases, the emergence of new forms of centrality does not coincide with the construction of a new part of the urban area, but with a re-generation of an existing one.

AB: Some of the economic processes that produced the regionalization of urban environments have introduced an interesting reuse process to some parts of the existing city, including the transformation of its buildings. Like what happened within the city of Milan, this observation also applies to the broader Urban Region, where certain aspects contribute to the transformation of existing spatial patterns. Due to the on-going restructuring of the economy, specific conditions of spaces, such as location, logistics, and transportation costs impact the strategies of entrepreneurs or companies. This generates reactions that influence the space and the socio-economic conditions of its inhabitants. At the same time, companies transform the space itself, modifying its initial condition in a mutual process of influences that spread transformations at different scales. As planners, we should take into account the spaces and buildings that will be occupied by new functions, but also those that will be abandoned, as they may represent a problematic issue for the city.

MP: Once again, it seems that the specific features of the space, i.e. accessibility, environmental qualities, contextual conditions, etc., influenced its potential role on a larger scale. Within the context of global networks marked by a potential ubiquity, local "things" represent the key factor within socio-economic challenges. At the same time, in the most advanced projects the idea is to produce more than a simple real estate operation that takes advantage of a specific area in a parasitic way. In some cases, stakeholders want to produce new kind of spaces, enthusiastically referred to as "destinations" that played a stronger role within territorial hierarchies, imposing themselves as places able to create a real experience for users. These spaces are characterised by a specific kind of urbanity, and, in my opinion, they are increasingly participating in the re-definition of current living, working, and social practices in the MUR as shared and sometimes public spaces within an atonic urban environment.

[59] Porter, M.E. (1998) *Clusters and the new economies of competition*, Harvard Business Review, November-December/98: 77-90.

AB: Are you arguing that new centralities have the chance to achieve a unique identity? In the last years, despite the emphasis on innovating functional integrations in these spaces, the result has been the construction of cinemas and some leisure/cultural spaces within shopping malls. In some cases, sport facilities have been included, but only a very few examples show real innovation of their format.

MP: In the MUR, we have a heterogeneous situation, in which centralities have a different degree of complexity and development. Even if the location of urban functions in the periphery still produces many monofunctional enclaves, a set of projects and recent transformations have shown this change of approach. Without entering into the architectural results, we can reflect on the multi-functional example of MilanoFiori Nord, a mixed-use compound established in the first peripheral crown of Milan.

This retail park/business district was erected along the A50 ring road (*Tangenziale ovest*) in Assago, in the southwest sector, It is the last step in a long-term transformation, where private stakeholders, following and interpreting planning strategies contained in the municipal *Piano Regolatore Generale* (General Urban Development Plan) and the *Piano di Governo del Territorio* (Regional Government Plan), developed a project for an area for innovative and tertiary services. The overall project aims to provide a new, self-sufficient part of the city, characterized by a huge number of offices and shopping malls, private and public housing, and activities such as the UCI multiplex, the Virgin gym and a small food court. Some elements seem to represent a step forward in the realization of a new polarity in the regional context. The metro line has been extended to Milano Fiori and reaches the sport and music hall (Forum), and it allows multimodal accessibility to the whole area. The integration of activities is quite high, and it produces attractiveness for a large part of the day. Around 10% of the total floor space is destined to residential buildings, easily accessible from the metro line and settled around a large green space. The link between all these different functions is the shared space of the central "*piazza*", in which pedestrian flow from the underground station ends at a square. Within this space, the germinal identity of a shared place has been established. The area's users/customers generated a seminal form of appropriation through their social encounters. The key element of this project is the relevance of the Master Plan designed by Erick van Egeraat for the northern part of the area. The final part of the project, completed in the last ten years, is an attempt to re-think the overall situation, emphasizing the role of connective spaces among functions through architecture and urban design.

After this first example, and in parallel with a set of consolidated practices (which represent a constant background), many projects showed a renewed attention to the creation of a unique environment in these new centralities, often relying on place-making protocols and strategies. The real possibility of producing "urbanity" of these shared spaces remains an open issue, as they still seem less vital and attractive than the areas dedicated to different mobility flows in between the various commercial buildings.

Nevertheless, these new centralities clearly contribute to the process of polycentric reorganization at the regional scale, through the improvement of the physical and social relationships among components and improving density and intensity of certain fragment of the urban region.

Some analyses of contemporary forms of centrality include explorations of their role as urban drivers and activators for their contexts (Sudjic, 2006; Hall, 2003). Recent studies (Paris, 2010, 2013, 2015) have also noted the identity of these spaces as places, and the impacts thereof in social and spatial terms. This approach is not original, but follows a long tradition in urban studies of discussing the abilities of societies to develop new places from different points of view[60].

One of the key points of the literature on new forms of centralities is that the contemporary post-metropolis, such as the Milan Urban Region, offers opportunities for functional aggregates to become drivers of spatial and social transformations, both in suburban areas and within consolidated cities. The MUR is also a testing ground for new forms of urbanity, declined through adaptive and/or disruptive processes in local contexts, especially when connected to infrastructure and physical or digital networks. As pointed out by Alexander (1965), the production of urban spaces is faster and easier than the generation of urban life. Therefore, the obsessive re-proposition of consolidated typologies and figures in urbanized territories (of consumption, social exchanges, or just public space) often does not correspond to a generation of public life. Often naïve and mimetic from an architectural point of view, centralities represent an alternative to the simplified, fragmented and privatized reality of post-metropolitan tissues. This approach moves beyond the successful, but out-dated and over-simplified rhetoric of non-places (Augé, 1992). The present analysis of the Milan Urban Region has focused on functional aggregates as centralities, which play a role as relational spaces for contemporary societies and their inhabitants. For this reason, central places are still a relevant issue in the field of planning and are essential in understanding current spatial patterns, in designing the future of cities, and in influencing the quality of life of inhabitants.

[60] For more than a decade, I have studied this issue through continuous and stimulating dialogue and collaboration with several academic figures, such as other members of the Urb&Com Lab at the Politecnico di Milano and Prof J.L. de las Rivas at the Instituto Universitario de Urbanística de Valladolid. He had a great influence on my work with his book "*El espacio como lugar*", his work on the relationship between the geography and the development of urbanization processes, and as my PhD supervisor, research coordinator, and mentor and he encouraged me in developing this field of research.

4. CLUSTERS OF CENTRAL FUNCTIONS

The central vocations of economic activities correspond to the conditions of advantage (in terms of lower costs and higher profits) that arise in the localisation of central and high-density spaces (Memoli & Rossignolo, 2011, p. 109)

The enduring competitive advantages in a global economy lie increasingly in local things – knowledge, relationships, motivation – that distant rivals cannot match. (Porter, 1998, p. 78)

The main point of the study[61] I developed during the last years uses the idea of clusters to describe the spontaneous clumping of central functions in urbanized territories. Clusters (Porter, 2008; Delgado et al., 2013) relate to both material and digital infrastructure and are based on the interrelation between the production, distribution, and consumption of goods, services, and experiences. They represent an original form of centrality in a territory where consolidated vocations and the influence of a knowledge economy co-exist. Therefore, in this chapter we will discuss the most salient aspects of that work as they pertain to the current conditions of European urbanized territories. As pointed out by Balducci, the idea of a cluster is an effective tool when examining new forms of centralities in post-metropolitan territories. It implies the presence of multifunctional aggregations, in contrast with the simplistic idea of urbanized territory as a "generic city" (Koolhaas, 1995). A reflection on clusters also involves processes that supported their formation, the intensity and the quality of the links that bind those objects to their context at local and regional scales, and the impacts thereof.

In order to apply the cluster approach to polycentric patterns, the concept first had to be explored and updated. Although the impacts of consolidated industrial clusters in urban and regional development have been extensively studied (amongst other contributions: Bellandi 2008 e 2001; Beccattini & Dei Ottati, 2006; Quinteri, 2006; Garofoli, 2003; Bagnasco, 2003; Brusco 1999, Beccattini, 1991), very little attention had been paid to the spatial role of the consumption-oriented and destination-based clusters (Pi-Feng & Chung-Shing, 2012) that now represent alternative forms of centrality in urbanized territories.

Next, to understand the role of these kinds of clusters as 'catalysts' in their local contexts and their influence on transformation processes in contemporary cities and regions, we focus on the manifold (social, economic, spatial) and multi-scalar (local, 'intermediate', and regional) effects of the presence of clusters in European territories characterised by a mature metropolisation (Indovina, 2007).

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[61] The research program, which I developed under the supervision of Prof Corinna Morandi and Prof Gabriele Pasqui at the Department of Architecture and Urban Studies and funded by Politecnico di Milano through a PoliMI International Fellowship 2016-2018, was entitled "Clusters of central functions as catalysts in post-metropolitan territories: comparing the effects of their dynamics in four European city-regions". This research took advantage of a set of explorations that I developed as individual researcher, starting from my MS thesis (entitled "*Superluoghi. Localizzazione, schemi insediativi, rapporto con il territorio: linee guida per l'indagine e la progettazione")* or as member of Urb&Com Lab (amongst others: the research program *"La valutazione dell'impatto territoriale delle grandi polarità commerciali: factory outlet centre, multiplex, parchi commerciali. Un approccio interregionale"*. Results of this research have been published in Brunetta & Morandi, 2009).

Using the Milan Urban Region as a testing ground, the first phase of this study has been dedicated to testing the effectiveness of the concept of the Cluster of Central Functions (or CCFs). The aim of the second phase was a focus about territorial roles of CCFs and the nature of their influences through a comparison of different case studies. The expected result of the research was a renewed set of interpretative tools to explain several current trends in European territories. In the following pages, the dialogue focuses on the outcomes of this study. Together with Balducci, we reflect about the relevance of those spaces in contemporary urbanized regions and how they are a relevant aspect in the field of urban and regional planning.

4.1 *METHODOLOGICAL NOTE AND CLUSTER DEFINITION*

The concept of 'cluster' was introduced and elaborated by Porter (1990, 1998) to describe agglomerations of productive functions, economic actors, and institutions that draw strategic advantages from their mutual proximity and connections. As noted by Bathelt et al. (2004), these advantages include lower transaction costs, access to a basin of skilled labour, shared infrastructure costs, and access to specialized knowledge. Porter challenged the mainstream view that recent technological and economic transformations undermine the role of location as a strategic factor for the competitiveness of a business and economic activity, insisting instead on the relevance of proximity. Maskell and Malmberg referred to this as the power of spatial locations that "possess varying capabilities that influence their economic development prospects" (2007, p. 603).

The classical theory on clusters views them as "geographic concentrations of interconnected companies and institutions in a particular field, [encompassing] an array of linked industries and other entities important to competition" (Porter, 1998, p. 78).

This definition points out a strong paradox of the contemporary economy, in which success in global competition relies on local factors, and the specific knowledge, relationships, and motivations of actors define favourable environments for economies of scale and innovation. Within this context, the quantity and the quality of the linkages between actors is of significant relevance for clusters. These connections go beyond standard relationships and introduce new forms of association and interaction, often based on the co-existence of cooperation and competition. These two aspects affect actors and processes at different levels while also stimulating the formation of an alternative spatial pattern, in which different kinds of hierarchies (vertical integration, value chains), new synergies (system economies, new forms of coordination based on effectiveness and flexibility), and complementary competencies (Richardson, 1972) take place.

Since this theory was first expounded, the idea of clusters has remained central to economic geography, especially in studies on competitiveness, innovation, and transformation processes at a regional scale.

To analyse the spatial distribution of clusters in Lombardy, I began by considering the geography of central functions previously developed with respect to mallification (see 3.1): the region contains 595 central functions, divided into Retail (281, 47.2% of the total), Culture (238, 40.0%), and Leisure-Entertainment (76, 12.8%).

This heterogeneous system of different uses generates a complex geography. The analysis began with the identification based on a set of criteria[62], among the total 595, clusters of functions that qualified as "central", which was the case for 97 aggregates.

TABLE 5: CENTRAL FUNCTIONS IN LOMBARDY REGION (I).

Areas	Mapped elem.	%	Central functions	Amount	%
Retail	281	47.2%	Retail Park	42	14.9%
			Shopping mall	108	38.4%
			Big Box	61	21.7%
			Cash & Carry	67	23.8%
			Factory Outlet Centre	3	1.1%
Culture	238	40.0%	Cultural Poles	23	9.7%
			Fairs and Exhibition Poles	14	5.9%
			Museums	201	84.5%
Leisure-Entertainment	76	12.8%	Theme parks	22	28.9%
			Sport facilities	20	26.3%
			Multiplexes	34	44.7%
				595	

Source: Elaboration of Paris, M. (2018)

This practice entails the drafting of alternative maps, diagrams, and schemes, in which the space is represented by re-combining sectoral-thematic information, statistical models, and geographic data (De las Rivas et al., 2014).

Over the years, researchers in different fields have gradually appropriated the idea of clusters (among others, Krätke, 2011; Potter & Watts, 2010; Boschma & Kloosterman, 2005) to explain the nested pattern of city-regions.

Therefore, taking advantage of an extended literature about in regional studies (i.e. Belussi & Hervàs-Oliver, 2017; Rodriguez-Pose, 2017; UN-Habitat, 2012; EC, 2010; Eriksson, 2009; Europe Innova, 2008, Maskell & Malmberg, 2007; Rutten & Boekema (2005), the research developed examines clusters from an urban and regional planning point of view.

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[62] A cluster of central functions:
- is an aggregation of three or more functions;
- produces physical continuity between different uses (main entrances of functions are located less than 500 meters from each other);
- contains a public/shared space as an interface between different parts.
These three criteria generate a set of spaces which were then used as a testing ground for further study using a taxonomy based on the work of Pi-Feng and Chung-Shing (2012), Miozzo and Soete (2001), and Pavitt (1984).

Several researchers (Rigby & Essletzbichler, 2007; Glückler, 2007) have observed that clusters follow a life cycle of birth, development, and decline. During this cycle, clusters also evolve, differentiating according to the specializations of companies and the characteristics of the resulting system (Dicken, 2007; Feldman, 2001). Studies of clusters have involved not only industrial and productive functions, but also other kinds of activities (retail, leisure, culture, tourism, education, health care, tertiary and advanced service productions) related to experience, knowledge, and innovation economies, which have strong territorial influences.

Pavitt's taxonomy of services (1984) has been recently been reprised by several authors, including Miozzo and Soete (2001) and Pi-Feng and Chung-Shing (2012) to define consumption-oriented regional service clusters. This typology reveals several common aspects within the aggregates of central functions. In both aforementioned cases, the subject of study was the space in which the exchange and the consumption of goods, services, and experiences (Morandi & Paris, 2015b) played a key role, and where the "experience economy" literally takes place. Thanks to these features, clusters come to be characterised by production and distribution processes for services that have both physical and digital dimensions. Therefore, depending on the interaction between clusters and networks, clusters can be further differentiated as "network-based", where services are produced within the cluster and distributed via infrastructure, or "consumption-based", where the production and the consumption of services occur in the same place (ibid). It is important to study these kinds of spaces because they have strong and multidimensional impacts on their specific contexts, ranges of influence (of local territorialities and economic developments), social interactions and living practices, material and digital flows, and networks, etc. Of all these impacts, the present research dedicates special attention to the spatial ones that involve location choices and settlement strategies developed by operators and public actors, new relationships and urban patterns, and the occurrence of specific competitive advantages. How these are related to the specific qualities of these clusters will be further investigated in the following sections.

The literature review of existing studies on clusters has allowed for the extrapolation of a set of key concepts, upon which our focus on their current impacts is based. In particular, scholars have pointed out four principal aspects of clusters:
a. The role of double proximity (Carrincazeaux & Coris, 2011; Boschma, 2005), between functions, activities, and their markets. In this sense, the physical nearness of companies, actors, and users is the primary reason for their interaction and, sometimes, the mutual exchange of roles (supporters and anchors that change over time).
b. The complexity of the relationships between functions that change and strengthen the cluster as a system. Within these relationships, companies generate interactions, compete, and can also cooperate, creating synergies. These connections exceed institutional forms and often rely on informal practices, based on relationships of convenience more than protocols or established processes.
c. The relevance of the links amongst the elements of a cluster and their quality as a strategic factor. This involves both material (infrastructures, drivers, interfaces) and immaterial aspects (networks, facilitators, media, etc.), and creates different impacts at different scales (from regional to architectural).
d. The dynamics relating to the action of private (firms, real estate investors, etc.) and public (local and regional governments) actors, including processes of mutual influences and exchange. Often in such systems, decisions regarding company processes and actors depend on specific changes to governance, territorial management, and/or economic stimulation.
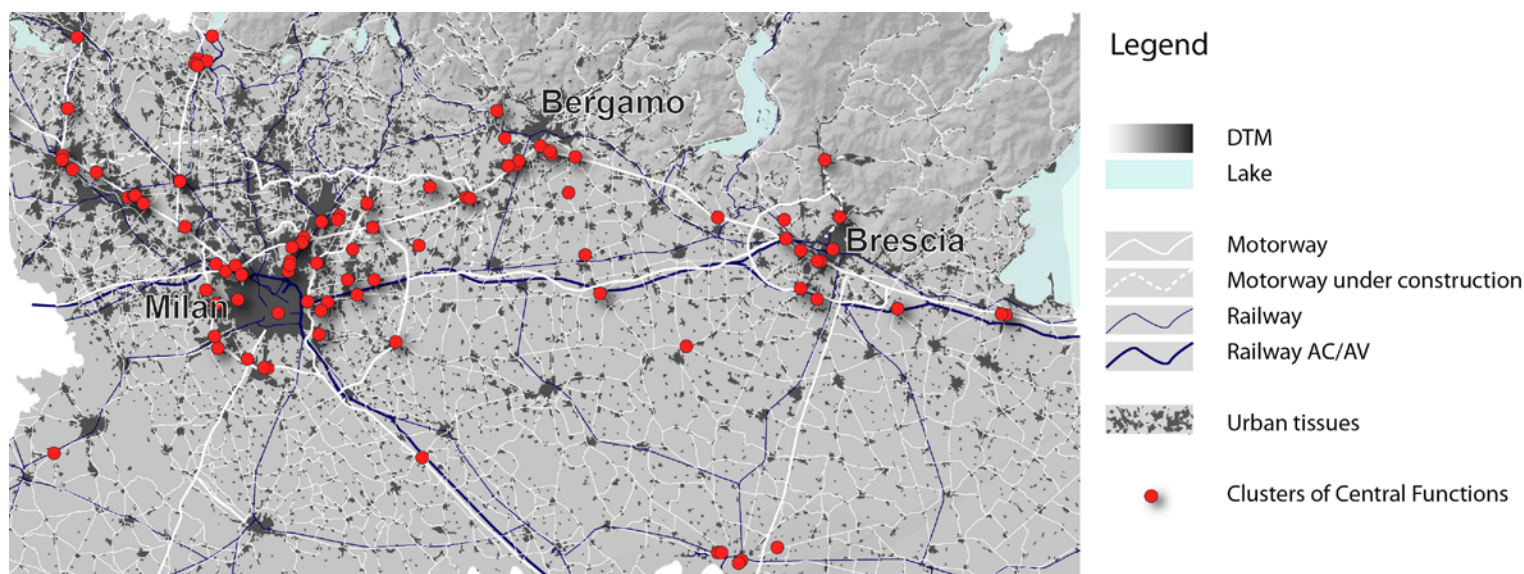
Figure 9. Distribution of Clusters of Central Functions in MUR core area. Source: Paris (2017).

These features were involved in our original analysis of the geography of "central functions" in Lombardy Region, particularly for those where the dual processes of sprawl and aggregation generate alternative, non-conventional spaces characterised more by a role of centrality than a central position. The map generated reveals a complex system that follows, articulates and/or anticipates settlement trends in the region. Despite the variety of elements of this system, the mapped clusters show three common features: (i) a remarkable size of the aggregation; (ii) a set of complex and dynamic synergies among functions, (iii) a specific kind of urbanity.

Observations on clusters of central functions

AB: I find the definition of Clusters of Central Functions is an effective tool when examining new forms of centralities. It is interesting that within this concept, there is an implicit idea of multifunctional aggregations.

MP: I use "cluster" to refer to an aggregate of at least three functions related to the production and consumption of goods, services, and experiences. The proximity among different elements allows users to experience these spaces as integrated systems, where unique living practices take place. As such, rather than a quantitative or econometric distribution of functions and activities, the map of CCFs describes a network of spaces that aim to become relevant places within urbanized territories.

AB: Are there specific examples in the Milan Urban Region?

MP: In the MUR, we find many examples that reflect these trends, but it is difficult to lump together this heterogeneous group of elements. In my research, I have tried to define the spatial distribution of the different systems of specialized centralities (related to services, leisure and culture, healthcare, etc.) and have focused on specific examples to study their nature. In more ambitious cases, the dimensions, variety of functions hosted, and their integration become key factors for the attractiveness of spaces, not only for people, but also for goods, investors, data, energies, resources, etc.

One sees these trends together in the regeneration of the Alfa Romeo factory in Arese, a shopping mall called "Il centro" (55,000 m2 of vending surface, 90,000 m2 GLA), a museum dedicated to the history of Alfa Romeo cars, and a training track, located in an abandoned industrial area (2 million m2) extending over three different municipalities (Arese, Lainate, and Garbagnate Milanese). The second phase of the project involved an extension of the mall, the opening of new retail functions (including an IKEA) and an indoor ski-dome.

Another example can be found in Sesto San Giovanni with the new project to transform the ex Falck area into a part of the city. The Masterplan designed by R. Piano includes the creation of a "Città della salute" (a healthcare, research, and hospital cluster) and a shopping mall (73,000 m2for vending surface, 85,000 m2GLA) connected by a high street bordered by retail and services.

A new shopping centre developed in Segrate (130,000 m2 of vending surface, 185,000 m2 GLA), close to Linate Airport, will include the development of a railway station that will represent the new East door of the city. In front of Il Caravaggio International Airport, the third in Milan, located in Orio al Serio (BG), there is the Orio al Serio shopping mall (98,000 m2 of vending surface, 105,000 m2 GLA), and its new expansion, in which cultural and leisure functions have been added to a traditional retail gallery. Meanwhile on the south of the city in Assago (MI) the Milanofiori area contains a retail park, shopping malls, cultural and leisure facilities, and a business district.
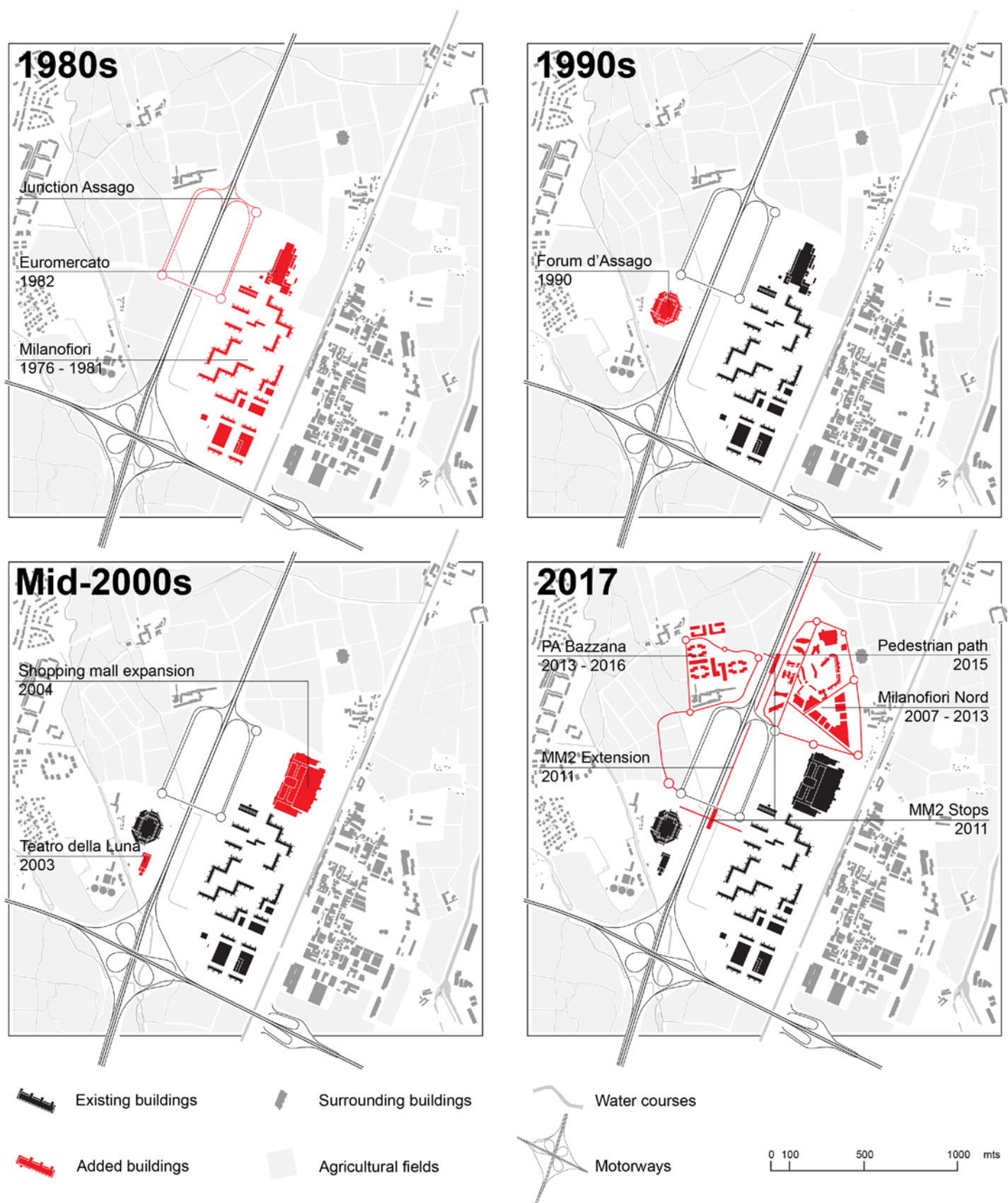
Figure 10: The evolution of the Milanofiori cluster. Source: Paris and Paracchini (2017).

AB: The integration of several functions is an interesting aspect of these centralities, as is the involvement of specialized functions, such as healthcare or education. Several different campuses have appeared in the MUR in the last twenty years, starting in the late 1990s with Milano-Bicocca University and the Bovisa campus of Politecnico di Milano. In the majority of cases, their location and characteristics are urban (as in Como, Lecco, Castellanza, Dalmine, etc.), but it is interesting to see how these functions worked as activator for specific contexts. In 2014, Valeria Fedeli and I explored the influence of the presence of Politecnico di Milano in the Milan Urban Region[63]. Two campuses, the IFOM and IEO locations[64] in southern Milan, involved higher education related to healthcare. The same is for Humanitas at Rozzano, that recently became a University. These locations are more peripheral, and their parallel evolution from hospitals to specialized service providers increased their role in the polarization of the urbanized territory.

A different case is the location of Scalo Milano City Style, located in Locate Triulzi (MI), but connected to Milan by a regional railway. It represents an experimental format where the retail offer of brands usually found in urban high streets (associated with fashion and design), is provided in a peripheral context. It's like a fragment of city placed in the middle of nowhere, an enclave. This is a curious case, and is difficult to understand the attractiveness of this space.

MP: Scalo Milano (35,200 m2 of vending surface, 40,000 m2GLA) opened in late 2016, and no data is yet available to assess its impacts on the socio-economic dynamics of the urban region. But the role of these centralities should be defined in the medium-long term. What is interesting is the integration of attractive functions and infrastructure networks and, in this specific case, connection to the regional railway network. This means developers and the authorising Regional Authority consider this connexion a potential asset, and believe user flows will be supported by a multi-modal system. Scalo Milano represents an attempt to innovate the formula, introducing the format of "lifestyle centre" into the Italian context – something that Italian customers associate with Factory Outlet Centres, but not with normal shopping malls.

AB: Irrespective of the specifics of each case, I think that those functions and their aggregations represent an interesting issue because they influence inhabitants' movements in urbanized territories, whose spatial distribution is both a products and producer of infrastructure development and user flows.

MP: In addition, we should consider that centralities attract different kinds of flows, not only those supported by physical infrastructure. For example, in the area of ex-Alfa Romeo factory in Arese, close to the shopping centre "Il centro", we have a warehouse of Fiege Logistics, one of the most important players in logistics for e-commerce and digital selling. In this case, it is interesting to see that much of the investment in digital and physical retail has occurred in the same place, creating original, hybrid functional mixes that influence the process of polarization of the Milan Urban Region.

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[63] Some results are reported in Balducci, A., Fedeli, V. (2014) *The university and the city. Changing and challenging geographies in the Milan Urban Region*. Disp, The Planning Review, n. 197, 2/2014, pp.48-64.

[64] IFOM is a cancer research institute that promotes the study of the molecular mechanisms underlying tumour formation and development, at its campus and through a network of partnerships with cutting-edge scientific organizations located in India and Singapore. The European Institute of Oncology (*Istituto Europeo di Oncologia* – IEO) works on cancer prevention, diagnosis, and treatment. It provides patient care, research, and education functions (Morandi & Paris, 2018).

AB: But this case, as in many other centralities, it is interesting to consider the types of user experiences that occur in these aggregates. As such, it becomes relevant to focus not only on spaces that attract and polarize flows and interests, but also those that have become obsolete, having lost their attractive power. This is an interesting topic, influenced by sociological and economic dimensions with a variety of impacts on the space. Indeed, we must recognize that these centralities, even if repetitive and based on consumption, represent an attractive space for a significant segment of the MUR population. But the experiences of their users are still individual, and these centralities still have a weak power to generate social encounters. There is a need to study – and consequently to develop –these spaces differently. Using retail functions as an example, is interesting to see the dual actions of practitioners who, on one hand, pushed for those suburban regional shopping malls while, on the other, pursue a removed colonization strategy for urban locations. Infill shops in central or semi-central locations, new openings of smart formats, and experimental projects of hybrid corporations represent attempt to came back to urban locations, and this is a new aspect after a long centrifugal phase. In this case, retail is a litmus test for a larger process of relocation of functions that will increasingly influence the urbanity of urban regions[65].

4.2 CLUSTERS OF CENTRAL FUNCTIONS IN THE MILAN URBAN REGION: SPATIAL INTERPRETATIONS AND OPEN QUESTIONS

Having defined clusters of central functions and their features and explored their geography, this concept can be used as an interpretative tool for several phenomena in urbanized territories. In this phase, the risk arises of using the concept like Marlow's hammer[66], diluting its effectiveness by applying it to phenomena that are not, in fact, connected to each other.

For this reason, the concept of CCFs is useful in defining indicators of many phenomena described in the previous chapters, but it generates weak interpretations if used alone. The role of local characteristics and patterns represents an important factor to consider in order to understand the speed and the pervasiveness of regional urbanization processes. At the same time, it is evident that some transformations have been only partially influenced by the presence of clusters and serve as accelerators of on-going dynamics. Therefore, the geography of CCFs has been overlaid with maps of territorial transformations, in order to evaluate the relationships between the two. The results show that clusters of central functions have been generated by and contributed to the transformation processes of regional spaces, influencing living practices and economies. Indeed, CCFs contribute to a renewal of traditional vocations and local territorialities.

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[65] See Chapter 3.3.

[66] The expression refers to a well-known sentence, "if the only tool you have is a hammer, treat everything as if it were a nail". This statement has been attributed to many authors, from Twain to Kaplan, Tomkins, and Baruch. Among others, Marlow (1966, p. 15) published a version of the phrase in his book "The psychology of science: A reconnaissance", and has since been attributed with it.

CCFs and suburbanization

The map in Figure 3 shows the correspondence between CCF distribution and urbanized territories. In this geography, infrastructure emerges as a driver that generates settlement opportunities and new peripheralizations.
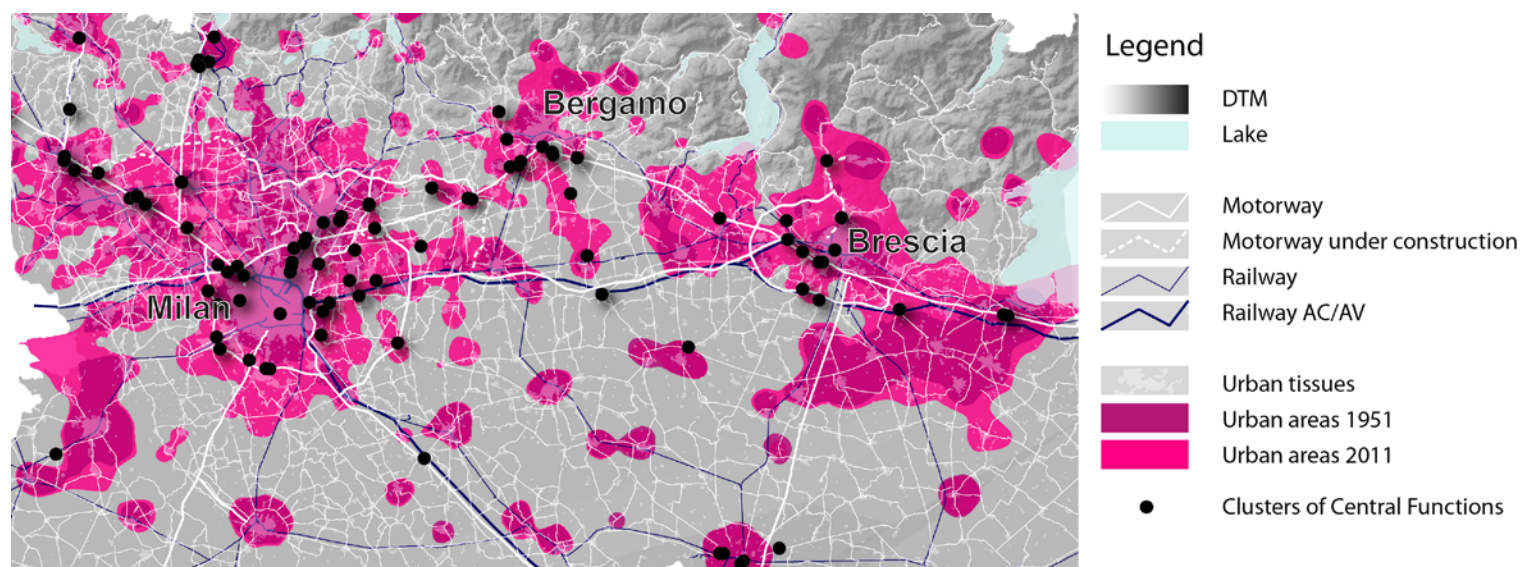

Figure 11. Clusters of central functions and suburbanization. Source: Paris (2017).

Along the A4 motorway, or the A1 in the Milan-Turin segment, several clusters appear that include consolidated central spaces. In the Milan Urban Region, the first and second peripheral crowns of the city play a strong role, where several CCFs occur within a periphery that arose in response to housing demand, but without a clear plan for service provision, despite the inter-municipal scale. The proximity to high-density spaces and important transportation axes, and the lower cost of land in peripheral municipalities influenced the settlement strategies of the developers who progressively colonized these spaces. This may also apply to other cities in the region, depending on their scale.

CCFs and tertiarization

The geography of CCFs also becomes interesting when compared with regional tertiarization processes. A detailed analysis of employment fluctuations in the Lombardy Region shows that the shift from an industrial to a service-based economy, although predominantly in the cities, has expanded, and now influences all the areas that form the metropolitan systems of Milan/Bergamo/Brescia. This process has been spurred on by clusters of central functions that contain companies employing a huge number of workers in tertiary sector.
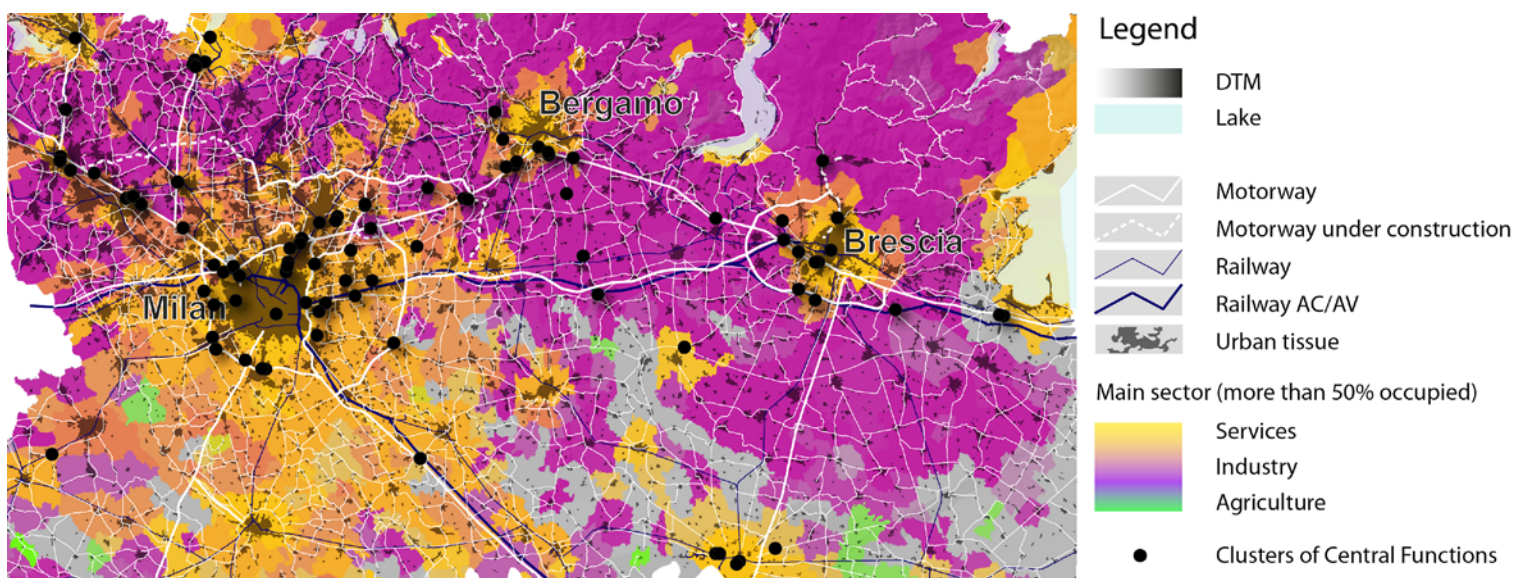
Figure 12. Clusters of Central Functions and tertiarization. Source: Paris (2017)

Through these analyses, the role of clusters as accelerators of processes becomes clear, as well as their impact on inhabitants' behaviours and economic systems. Further studies should overhaul the spatial reaction to these pressures. The variety of situations that affect the Milan Urban Region necessitate a new alternative to over-simplistic approaches, one that is sensitive enough to appreciate the complexity of interactions between local realities and CCFs.

5. TOWARDS GOVERNANCE FOR THE POLYCENTRIC (POST) METROPOLIS

In the contemporary city, we could say that the rhythm of change appears syncopated and improvised, but also slow and karstic. The long histories count, and can't be erased as easily as we may have thought, but they also crumble just as quickly.
(Balducci et al., 2017a: 297)[67]

The present book offers observations on urbanization processes in European territories, where relational, administrative, and socio-cultural dynamics have influenced the transition from mono-centric to polycentric cities. This transition, according to Meijers et al. (2012), can be divided in three phases:

- First, a slow transition, which began in 19th century with the urban growth prompted by the industrial revolution. The process then accelerated with the increased affordability of transportation and the transversal increase in income levels, increasing the importance of the middle class. The progressive suburbanization of the population was accompanied by a displacement of urban functions outside of dense historical tissues;

- Second, a more recent and faster transition, involving the urban structure of cities, in which "a polycentric pattern emerged with a more spatially specialised metropolitan layout incorporating many different types of centres" (Meijers, 2007, p. 49). During this transition, "post-industrial cities achieved structures that are, in fact, polycentric" (Meijers et al., 2012, p. 15);

- A third transition, during which growing cities under pressure from urbanization coalesced into polycentric metropolitan areas. These processes produced a specific environment – the contemporary urban – marked by "an extensive and fragmented character as opposed to the intense and spatially contiguous urbanization of the traditional city … Its morphological deconfiguration transforms the structured and readable linear text of the city into an unstable and differently organized hypertext" (Portas et al., 2011, p. 35).

These transitions and their mutual contaminations have been influenced by the shift from an industrial to a services and finance-based economy. According to Lambregts (2009, p. 5) the "de-standardization of production processes (enabled by computerization) and the search for greater product variety (both supply and demand driven) have triggered a shift toward more flexible modes of economic production and organization". The rescaled formations of urbanized territorial organizations (Brenner & Schmid, 2014, p. 743) produced by this shift become rich and innovative milieux that appeal to the imagination of planners, geographers, and policymakers alike (Lambregts, 2009, pp. 4-5).

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[67] "Nella città contemporanea, potremmo dire, il ritmo del cambiamento appare sincopato e improvviso, ma anche lento e carsico. Le storie lunghe contano e non si cancellano così facilmente come per alcuni versi potevamo attenderci, ma si sfaldano in maniera altrettanto veloce".

Despite the widespread interest in these topics, there is still a lack of knowledge about the polycentric patterns of urbanized territories and their socio-economic and spatial dimensions in the planning field, and for this reason this issue need to be rethought. This need is even more urgent because the production of original knowledge in this field won't only support academic approaches to these spaces, but will also impact decision making processes and future actions of public and private stakeholders, which will have a significant influence on urban regions and their inhabitants.

The previous chapters of this book have focused on development processes in current urbanized territories and their polycentric patterns, focusing on the Milan Urban Region as a case study to observe the various types of centralities that permeate its structure.

In this final chapter, we will focus on spatial governance challenges in urban polycentric regions, pointing out how current systems pose new questions for planners and policy-makers. In the first section, we will explore the need for innovative approaches in this field (5.1). In this respect, we focus on the role of new spaces of centrality as a testing ground for a flexible approach, able to address plural and differentiated dimensions of the presence of CCFs (5.2). This overview concludes with a set of open questions for the future of these spaces, when economic, social, technological, and spatial changes will transform the very context (Palermo, 2009) that made their existence possible (5.3).

This is keeping with the research goals pursued by Balducci in his recent work, in which he has examined the offer of urbanity in the post-metropolis and its territorial impacts. Our dialogues reflect on the challenges, risks, and opportunities in current spatial hierarchies and emergent territorial systems, which constitute open questions for future planners. In the following pages, Prof. Balducci will clarify how reflections on planning theory have concrete impacts for the lives of inhabitants in current urbanized territories. When planners act and interact with academics, politcy-makers, associations, and activists, etc. they influence the development of material spaces, their vibrancy, and their inclusiveness. Therefore, their actions require a strong consciousness and sense of responsibility, something that has always been present in Balducci's work, who has taken on all each of the roles in the policy community at some point.

Textbox 5: Learning by practicing? by Prof. C. Morandi

The main point of the discussion between M. Paris and A. Balducci deals with the difficulty in finding the right scale to observe the phenomena of continual urban change in the post-metropolis condition. Paris clearly frames the issue, recalling the international literature engaged in defining the characters of contemporary regional territories where physical and immaterial relationships impact much more than institutional decisions in establishing the administrative boundaries.

The discussion of the case study - the Milan Urban Region - is the core of the confrontation: a common ground in the theoretical and applied research activity of the authors, with different levels of intensity. The need to overcome the administrative borders is clear and accepted in both research and institutional debate. The discussion proves the difficulty and the ambiguity in overcoming the description of the territorial context under the lens of the authors in dialogue, finalizing it to operational planning and policy tools. It seems sometimes to be a problem of lexicon, as different definitions apparently refer to the same context, but the reflection goes more in depth, as it is not just a question of scale or extension of the urbanized territories, but it involves the characters of the relations of the actors acting in a context.

The focus on a specific area is very helpful to outline both the fertility of new descriptions of the contemporary urban regions and the gap still existing in the experimentation of tools to overcome the rigidity of the boundaries and to foster the flexibility of the processes. Introducing the issues of polycentrism and clusters of centralities as drivers of the re-configuration of the patterns of urbanized regions, Paris refers to the representation of the Lombardy region: that is a very defined institutional context. But, as clearly argued, processes of regional change – such as de-centralization and polarization - occur because they are based on economic, social and territorial elements, for instance following the effects of the presence of territorial infrastructures, which don't "respect" administrative borders. Referring to the Lombardy Region, clearly restricts the issue of showing other, more meaningful, processes of configuration of territorial systems, influencing the neighbour regions of Piedmont or Emilia Romagna. With an interdisciplinary approach taking in account geographical, economical and planning issues, efforts were done in recent research to provide representations focusing on territorial phenomena which overcome the institutional borders, greatly influenced by the accessibility and by the attractiveness of aggregations of activities, often coinciding with the clusters recalled by Paris.

5.1 NEW URBAN QUESTIONS AND CHALLENGES FOR TERRITORIAL GOVERNANCE

According to Lambregts (2009, p. 7), interfering processes of spatial concentration (in existing centres), deconcentration (away from these centres) and reconcentration (resulting in new centres) of both settlement, production and consumption spaces continued to transform previously 'straight-forward' city-regions into increasingly complex, polycentric and multifaceted agglomerations.

Current scale of urban phenomena and their complex patterns are redefining traditional relationships (such as internal-external, core-border, or centre-periphery) presenting many different intermediate steps and new subversive arrangements. Within these environments, often based on weakened hierarchies where horizontal interactions prevail over vertical orders, dependency and change appear as key factors.

As pointed out in recent books by Balducci et al. (2017a, 2017c, 2017d), post-metropolitan territories represent a condition more than a specific environment. This condition fits neither the traditional nor the updated definitions of the "city", due to relational, administrative, and socio-cultural factors. This is even more relevant when one considers that the current status of European urbanized territories is the result of an overlay of processes that have followed bottom-up pressures (fragmented settlement strategies developed by local actors, real estate trends, mobility-dependent influences) and, at the same time, specific strategic and regulative approaches, implemented in accordance with EU policies and national legislations. The strategies promoted by the EC since 1986 to strengthen economic and social cohesion as part of its spatial development perspective (EC, 1999) have played a key role. The relevance of this issue became evident thorough the publication of many documents after the Lisbon Treaty (2007), such as the Green Paper on Territorial Cohesion (EC, 2008) and the Territorial Agenda (EU, 2011).

These contributions aim to reinforce territorial cohesion. In this respect, the scale of cities and city-regions became a central point in the EU's efforts to produce balanced territorial development, including their relationships with the surrounding intermediate and rural areas (Meijers et al., 2012, p. 25-26). Institutional documents, academic research, and practitioners have all recognized that the urbanization of territories and the regional dimension of this process are two intrinsic conditions of the European space and a factor that planners must consider. In this unprecedented environment, it is important to understand how this influences actions, poses challenges, and offers opportunities.

The work of planners should entail descriptive tasks aimed at defining the forms, dynamics, and performance of spaces, and operational tasks with a direct influence on the agendas of policy-makers and private actors. Current institutional and statistic models that are still anchored to urban/metropolitan patterns are ineffective in describing the transition in which former cities become networks of transcalar urban agglomeration (Balducci et al., 2017a, pp. 16-17). This distance between the material status of a space and its institutional representation involves extraordinarily perplexing challenges for researchers and policy-makers (Scott, 2001, p. 813). According to Balducci et al. (2017a, pp. 302-303), these challenges affect governance and territorial agendas (2007) in two different respects: in determining the proper geographical/institutional dimension at which to manage spaces, as suggested in the fifth cohesion report of the European Commission (2010); and in the urban questions that the current dispersal and fragmented condition of cities poses to policy-makers and public bodies, at different levels (Brenner & Schmid, 2015; Brenner, 2000).

Do spatial descriptions support territorial governance?

Several authors pointed out that the production of accurate representations of current phenomena is a key point in defining effective governance in the planning field (Mantysalo & Grisakov, 2017; Haley, 2007). The spatial knowledge produced in Balducci's recent work on urbanized territories (Paris, 2017a) represents a framework, a sort of living picture that explores causes and possible scenarios at the same time. Atlas and Regional portraits of the PRIN coordinated by Balducci depict spaces marked by concurrent pressures (centrifugal, centripetal, and dispersive) that characterise the interactions between the inertia and local constraints of places (morphologies, historical settlement patterns, infrastructure, etc.) and new territorial hierarchies. But these efforts to identify complex interactions and their particular scales within urban systems serve no further purpose in a merely descriptive role. These depictions of the complexity of urbanized spaces should then be used to achieve effective, balanced, and "good" (Lowery, 2000; Bollens & Schmandt, 1982) territorial governance.

To sustain attention to the whole of an urban agglomeration, there needs to be a strong link between the public sphere of a political community and the governance practices through which strategic actions to shape a city are arrived at. (Healey, 2015, p. 268)

According to Balducci et al. (2017a, pp. 298-299), one of the limits of this approach is the nature of the observed environment, and its "rough" condition – generated by flows, interactions, exchanges – which is difficult to frame within a single dimension or a specific scale. Many studies and publications have already underlined the need to define a new dimension for spatial governance. The recent introduction of new laws regarding metropolitan cities in Italy (Law 56/2014, "Riforma Delrio") and in France (Law of 27 January 2014 for the modernisation of territorial public action and the affirmation of metropolitan areas) reflects the relevance and transversal nature of this topic in Europe. These national laws raise open issues for planners, because they aim at: (i) defining new institutional levels for enhancing the coherence between institutions and public bodies; (ii) improving democratic representation of all elements of the system; and (iii) reducing the risk of duplicating competencies and conflicts. This should improve the incisiveness of public bodies and policy-makers on urban systems, without producing void institutions and/or imposing rigid schemes on fluid processes and interactions.

When combined with new institutional architecture, these territorial descriptions that involve non-institutional scales should influence the territorial agenda. The resulting multi-level policies, strategies, and actions should take in account the flexible contemporary relationships that exist between companies, cities, and territories, and between territorial systems and their socio-economic and spatial impacts (Paris, 2017). To be useful, new knowledge on existing spatial conditions should focus on the specific potential and weaknesses of local contexts, introducing a place-based dimension within the institutional approach.

Addressing contemporary urban questions

The need for a territorial agenda that is sensitive to the current scales and dimensions of urban systems is even more relevant considering the diffusion of interactions, issues, and – often – conflicts related to the urban activities, populations, and lifestyles that take place in urbanized territories. Current approaches to spatial governance in urban regions anchored to traditional models do not seem adequate (Balducci et al, 2017a, p. 304): the forms and scales of urban systems are only partially recognised by planning tools that use institutional borders and hierarchies (basically top-down). As pointed out by Salet et al., these traditional governance models reveal "further weaknesses today, as they embody a classical view of the 'periphery' as a target rather than a major player in regional developmental strategies" (2015, p. 252). Nowadays, the municipalities that constitute urban regions must address pressing issues, such as the concentration of migrants, low-income populations, the elderly, housing demand, social polarization, etc. These issues do not only affect central areas or major cities; they represent a source of conflict for the whole urbanized space of which the city is composed. As noted in the PRIN research project "Post-metropolitan territories as emerging urban forms: the challenges of sustainability, inhabitability, and governability", current urban questions affect a set of rights (the right to the city, to social life, to urban 'taste') that are difficult to define. Planners are asked to support policy-makers in a reality "various ideas of the city and urbanity coexist in circular territories of concurrence that are invisible and unrecognisable, where the reticular dimension reproduces and multiplies the boundaries and the typical fractures of the 19th century city" (Balducci et al., 2017a, p. 305), at a larger and larger scale.

But this switch to the regional urban scale and this interest in their reticular patterns that Balducci's work has inspired, including in the present book, is just the first step in the exploration of new governance for today's urbanized territories. We must focus on the specific needs of post-metropolitan inhabitants and the nature of their problems: new forms of poverty or exclusion (e.g. digital); new lifestyles that require the support of specific infrastructure and spatial configurations; new conflicts among generations or populations; new peripheries created by a lack of networks or links; the dramatic homogenisation of urban spaces and the banalisation of their landscapes; and many other issues related to sustainability and land consumption. These issues are both the products and producers of current urban patterns, and only through a relational interpretation that connects problems with spatial features can innovative approaches in planning be developed.

Dealing with post-metropolitan governance

MP: Are current administrative patterns able to support effective spatial governance for urbanized territories?

AB: The current administrative structure is inadequate for managing post-metropolitan territories. But the process of reforming it is difficult, as is the recognition of new borders from both an institutional and a practical point of view. With respect to the new patterns of the contemporary urban and its regional dimensions, this inadequacy of governance has key implications. The analytic process through which researchers explore the phenomena, processes, and dynamics of the post-metropolis should also address the scale of its governance.

MP: Your recent work discusses the detachment between institutions and territories, the lack of institutional representations in metropolitan systems, and the ineffective dimensions of the existing institutional bodies dealing with current urban dynamics. As a result, their action is often fragmented over time and weak in terms of socio-economic and spatial impacts. Even if institutions and policy makers were effective in setting up solutions for those spaces that already have institutional recognition (though indeed they are not) what happens on the borders of post-metropolis, and in those spaces that are far from metropolitan systems?

AB: This detachment is problematic in that there is a lack of correspondence between spatial phenomena and their political representation: this increasing distance is rendering ineffective the strategic tools and governance approaches that policy-makers and public bodies employ. We must also address the 'soft spaces' and, in general, all the areas in which timely – and often innovative – attempts at cooperation depend on volunteer experiments, without institutional recognition. In this sense, governance should seek to achieve a convergence of processes of self-aggregation (bottom-up) and the recognition of a need for formal definition (top-down). In this way we can re-build a connection between urban systems and institutional representations and, at the same time, we can reinforce these agile and operative aggregates. Without this second component, experiments with volunteer associations and inter-municipal associations tend to be fragile.

MP: What does this mean in terms of governance?

AB: We need innovative forms of governance that are able to provide support and orientation to local institutions, and governance for large areas that contain diffused urban galaxies. In this sense, the role of central and regional governments is important. Together with municipal and provincial authorities, we should explore the role of regional authorities within the governance of the post-metropolis. Such research is timely, and we should re-think the scale, or rather the scales, of territorial governance. The focus should be on the inter-regional dimension (e.g. the Turin-Venice-Bologna triangle), and its work with other bodies on the sub-regional metropolitan scale. In Italy, recent institutional reform has partially dealt with these issues, but only for metropolitan areas recognized by the central state[68], and this reform over-simplifies the issue and fails to introduce an innovative approach.

MP: This 'imposed recognition', based on a simplistic translation of existing provinces into metropolitan authorities generates a dual weakness: on one hand, current urban systems do not correspond to metropolitan bodies, if they exist at all, because they have been modelled on administrative borders that were drawn for other purposes. On the other hand, many medium cities have been excluded, even though they have developed systems that entail specific metropolisation processes[69]. Among others, cities like Verona, Bergamo, Brescia, and the urban system of central Veneto (which includes Padua and Vicenza) have not been included in the list of metropolitan cities. The lack of administrative identity of these aggregates of medium cities and their metropolised outskirts require institutional recognition and support to build cooperative processes. This need is more complex than a simple demand for economic resources. Municipalities require support for strategic orientation on issues like water and waste management, flows of people and goods, tourism, and heritage buildings. In such cases, the inter-municipal scale seems to be the most effective in addressing these needs, and would be an innovative dimension in the consolidated institutional pattern.

AB: A variety of volunteer municipal cooperatives have arisen in recent years. Although they have many different aims and forms of association, the common factor of these bodies is their fragility and their ability to become a reference for territorial governance. How long can they survive? What goals do they achieve during their life cycles? Innovation in territorial governance cannot rely on traditional institutions, or new institutions with the same old limits and weakness. Rather, the answer is to include new institutions engaged at intermediate, non-institutional levels and with the strong support of regional and central authorities. This pattern works at the macro scale, producing a strategic vision that influences the system and its components, and at the micro scale, in terms of collaboration to achieve specific goals, as we proposed in some pioneering plans[70]. These institutions must gain reliability in order to become credible interlocutors in institutional panels. At this scale, planning has a direct impact on land use management and spatial governance, i.e. preventing land consumption, construction beyond actual demand, or building designs with no connection to the needs and potential of local contexts. If the municipalities that belong to homogeneous areas and are affected by similar processes

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[68] Law no. 56, approved by Italian Parliament on April 3rd, 2014 indicates the cities of Turin, Milan, Venice, Genoa, Bologna, Florence, Bari, Naples, and Reggio Calabria as metropolitan cities, and invited the Autonomous Regions (Sicily, Sardinia, and Friuli-Venezia Giulia) to do the same in their own territories. The city of Rome had already been recognized as metropolitan city through a different process (D.Lgs. 17 Sept. 2010, no. 156; D.Lgs. 18 April 2012, no. 61: and D.Lgs. 26 April, 2013, no. 51) and it was equated to the new ones.
[69] Indovina, F. (2007) The metropolisation of the territory. New territorial hierarchies. In: Font, A. (ed.) (2007) *L'explosión de la ciudad: Transformaciones territoriales en las regiones urbanas de la Europa Meridional*. Madrid, E: Ministerio de Vivienda, 20-47.
[70] Specifically Dalmine-Zingonia, see. Ch. 1.1

of urbanization could coordinate their planning and territorial governance, they could improve their control of space and its dynamics. This would help to avoid service replications or incoherencies, especially where resources for local welfare are limited.

MP: Once a cognitive framework has been defined for current urbanized territories, the task for planners becomes the governance of these spaces. Have you addressed this within your work?

AB: From 1992 to 2000, I collaborated with a multidisciplinary group, working for the Lombardy Region and coordinated by A. Magnaghi, on the recovery plan for the area around the rivers Lambro, Seveso, and Olona. This became a test for the strategic planning approach, and involved a methodology based on interaction with local actors. Our aim was to implement a general strategy of territorial/ environmental rehabilitation of the river basins. Within this task force, I focused on intermediate aggregations of municipalities that could potentially collaborate on specific targets. Similarly, the *Città di città* plan[71] also sought to identify enlarged forms of urbanity that included multiple municipalities. We recognised the role of these aggregations and we underlined the initiatives they had put into practice to implement strategic guidelines with concrete actions (*Agenzia Nord Milano, Comprensorio Adda-Martesana, Comprensorio Legnanese*). Among these, the case of North Milan was emblematic. Four municipalities (Cinisello Balsamo, Bresso, Cologno Monzese, and Sesto San Giovanni) realized that by presenting themselves as aggregation, they could achieve a unique identity, one that was different and more complex than the external periphery of the city. In the Province of Milan, these aggregations of municipalities became a reference in the territorial agenda, and, with *Città di città*, within the planning system.

MP: These aggregations seem to be an effective tool in planning. Have you also found that they have weaknesses?

AB: Due to the volunteer nature of these peripheral aggregations, the lack of solidity is their greatest weakness. Without support from the central city, they gradually lose power, and their projects falter.

MP: In addition to their volunteer nature, these cooperative bodies merged territories from different municipalities, generating sub-regional sectors at an intermediate scale that does not fit within institutional definitions. In what dimensions can planners' actions be effective and useful?

AB: As I said, the definition of borders in order to identify and regulate urban phenomena is difficult and risky[72]. This key role of borders depends on our current forms of governance, which now seem out-dated. We should innovate in this field, developing a new approach to territorial governance. The new governance should involve advanced cooperation among institutions, incorporating and eclipsing the existing municipal-based approaches. This will require a strong involvement of central powers to support cooperation. Only through this approach can we avoid meaningless repetitions of functions, services, and urban materials in the space. These new bodies/institutions will need to develop shared services and manage territorial organization. As such, planners must move beyond current administrative borders, many of which were established two centuries ago. The reality of the new urban forms

[71] See 1.2.
[72] See Ch. 2.

exceeds these perimeters, and the solution cannot be the definition of new ones. Administrative borders should be a starting point to define different kinds of aggregations working on both "meso" and "macro" scales.

MP: Together with new dimensions of governance for urbanized territories, in these interviews you have advocated a new consciousness regarding the processes and dynamics that characterise the transformations of EU cities. Do you agree with Friedmann[73] that the forces that have led to the demise of the city could not be held back, let alone reversed?

AB: I think that the Friedmann's image of the "dead city" is a provocation more than a definitive statement. We used it in this sense in the most recent PRIN research. The city is not dead, but its form has profoundly changed. In my opinion, the real weakness is the way we view the city as planners. And this is not a new problem: over time, we looked at the city through the lens that we developed for the village, at the metropolis through the lens of the city and, finally, we tried to interpret the post-metropolis with ideas and concepts developed for the metropolis. We cannot explain polycentric patterns of urbanized regions with tools that have been developed to describe a city with a single centre, a defined periphery, a clear distinction between industrial areas and residential suburbs. The city today is another thing, and those anachronistic attempts, including recent definitions of the borders of metropolitan cities in Italy, are leading us to misinterpretations of current phenomena. The Milan Urban Region, that no longer fits within institutional borders and defies any sectoral definition, is a clear example of this disconnect.

As planners, we must describe the mechanisms of these transformations and all the minimal rationalities, as Secchi[74] called them, that influence these processes. These rationalities belong to each single administration, landlord, real estate or economic developer, etc., but also to each specific family. All together, these single rationalities have produced the current degree of urban development, without effective – or even an attempt at – governance. In other comparable situations, these forces have been coordinated in order to control such phenomena.

As noted in this dialogue and in the recent work of Balducci et al. (2017d), the new urban questions are related to regional urbanization. To answer them, planners must understand the interrelationships, influences, and conflicts of the everyday life of urban regions, their needs, contradictions, and opportunities. This should entail the use updated analytic paradigms and narratives, and consideration of the factors that influence urban inhabitants' quality of life.

At the same time EU documents and guidelines on territorial cohesion call on scholars and policy-makers to develop post-metropolitan agendas that will allow functional, cultural, and institutional integration. This in turn is expected to promote economic growth, spatial regeneration, competitiveness, sustainability, and social equity.

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[73] Friedmann, J. (2002) *The prospect of cities.* Minneapolis, MN: University of Minnesota Press, p. xi.
[74] Secchi B. (1999), Città moderna, città contemporanea e loro futuri. In: Dematteis, G. (1999) *I futuri delle città. Tesi a confronto.* Milan, I, Franco Angeli, 68-41.

To face these complex challenges, planners will need to shift away from metropolitan, border-based approaches and toward more relational approaches that move between scales. The question then becomes how to support this change in approach, and how to make concrete technical contribution (see 2.2). To contribute to the development of a new narrative on urbanized territories, the present book has offered insights on one specific aspect of post-metropolitan patterns: their polycentric structures and the governance challenges for non-traditional spaces of centrality. When combined with other focuses, this should constitute a solid base for future post-metropolitan spatial governance.

5.2 MANAGING CENTRALITY

Chapters 3 and 4 explored the configurations of urbanized territories, particularly their polycentric patterns. In the analysis of cultural discourse and the focus on the Milan Urban Region, we have identified a variety of systems of central spaces within the post-metropolis. In current urban regions, a set of centralities integrates the offer of consolidated urban centres. We have taken into account both the morphological and functional aspects of centralities (Burger & Meijers, 2012, p. 1129) to investigate their nature, modes of operation, and impacts at regional and local levels. Regarding the latter, the study has considered many aspects: from matches with the transnational networks of the knowledge economy (Thierstein, 2015), to their impacts on urban economic systems (Limonta & Paris, 2017), to their role within regional hierarchies, and their identities as places (Morandi & Paris, 2015; Paris, 2009).

This research has sought to move beyond ideological approaches and implement specific methodologies. We have focused on the characteristics of alternative centralities (e.g. Clusters of Central Functions) and how current cities and territories react to their presence. In this production of specific spatial knowledge, the representation of space (at different scales) becomes a tool for understanding on-going processes and consolidated trends. One of the main findings is that private developers, sometimes without an overall view or any specific knowledge of planning, exploit clusters and the competitive advantages they offer. These advantages often depend on local characteristics (accessibility, attractiveness of context, environmental quality, richness and variety of inhabitants, etc.) and stakeholders seek to transform these features into economic value (real estate, retail, services, etc.). In some case, this represents a risk for local systems in terms of economic (horizontal and vertical competition, absorption of demand, etc.), social (gentrification, banalisation of offers, marginalization, etc.), and spatial impacts (construction of new enclaves, abandonment of existing buildings, multiplication of greyfields, etc.). But the impacts of clusters of central functions are not always negative (Rosenthal & Strange, 2004). The presence of CCFs represents an opportunity for many types of spaces (provision of services and facilities, especially in low-density contexts) in terms of economic and social re-activation (attractiveness and visibility, interaction between global trends and local potential, etc.).

These findings confirm that one of the most interesting aspects of urban and regional studies is the role of public actors in the location and the transformation of clusters and in producing a governance structure able to take advantage of their presence (Martin & Sunley, 2003).

Clusters are an important part of the habitat of contemporary society and public actors have the power to influence the current and future quality of life of the inhabitants of European territories and cities. Considering the functional and spatial qualities of the relationships between various uses, clusters, and contexts, how to stimulate the specific urbanity developing in clusters and how to improve synergies among actors are important open questions for both public and private actors.

Having recognized that clusters represent a strategic advantage for their contexts, the challenge for public actors becomes how to extract territorial (and not only economic) value from them. This topic is even more important today in terms of certain trends (consolidation of urban areas and the colonization of urban voids, transformation of peripheral opportunities and regeneration of greyfields, colonization of public and private transport nodes) and their programs/functions (selective consolidation of metropolitan poles, pressures on fragile formats, specialization and/or integration of offers, gigantism).

Supporting an awareness of polycentric territories

MP: If governing urbanized territories is a complex task, the management of their central spaces seems to be even more challenging, due to the difficulties in defining their impacts, their scale of influence in different fields, and the possible compensation of the externalities they generate. Can one conceive of governance for centralities?

AB: Properly managing centralities of urbanized territories necessitates re-thinking their structures, and how they can be restored. This is an open question that we should keep working on from many points of view. Governance has impacts on urban quality, service provision, mobility, transportation, and infrastructure. To manage centralities, we need to be aware of all these aspects. So far the field has lacked vision on this topic. The Italian central government has delegated a set of sectoral competences to regional authorities (retail, tourism, planning regulation), but this sometimes seems more avoidance of decision-making than a real process of deregulation or improvement of local autonomies. As planners, we should support this new awareness through research.

MP: But can we assign responsibility for this lack of control in the overall process of regional urbanization?

AB: This is not a simple question. Planning as a discipline and current government structures have often been unable to respond to the existing needs of qualitative urban spaces or prompt the transformation of existing built spaces into places with urban vibrancy. Society has responded with ad hoc do-it-yourself solutions. We must re-consider our position as planners in light of this void. If we recognize the current post-metropolis, we must work with it, to intervene where there are problems from cultural and practical points of view. In my opinion, important work has begun in Italy.

In 2011, the two studies that were best funded by Italian Ministry of Research and Universities (MIUR) were dedicated to the "post-metropolis", which I coordinated[75], and the re-cycling of buildings and infrastructure[76]. These topics are closely related and represent a key issue on the urban/metropolitan agenda. During a meeting of the "Post-metropolis" PRIN, Salet, a member of the international advisory board, pointed out that while the economy and society change fast, physical space and the territory react more slowly. This asymmetrical adaptation produces a friction that leaves a mark on the space. What we can do with these inherited socio-spatial challenges[77]? Within this asynchronous rhythm of transformations, institutions change with great difficulty.

MP: So current territorial problems are institutional problems?

AB: Institutions, in the field of urban and regional planning, should make sure that physical spaces are able to respond to socio-economic needs. As planners, we must focus on this aspect, and support institutions in dealing with unique territorial problems that involve scales, impacts, and a panel of actors that are different from the traditional ones in which institutions have been conceived and set up.

MP: Once again, the "uniqueness" of these frictions also depends on the different response times and flexibility of institutions when dealing with socio-economic issues. When searching for a new correspondence between territorial realities and forms of governance, scholars should be able to anticipate (or at least identify) on-going trends and raise them in the institutional debates that can influence regulatory approaches. For example, the stakeholders involved in the development of new forms of centrality outside consolidated cities, are now extending their actions to central cores. Are institutions able to deal with these new ways of producing the city today?

AB: During my time as Deputy Mayor of Milan delegated to urban planning and agriculture, I had dealt with this specific issue. As shown by investors' interest in several central spaces, there is still pressure on urban cores. The transformation of Piazza Cordusio[78] is a key example of this trend. This intervention – or better, this group of interventions – constitutes the action of foreign capital and players (hedge funds, international companies, etc.) in consolidated urban areas. This is an exception in Italy. Within this process, several tertiary buildings that used to have administrative functions (post offices, insurance companies, etc.) fell into disuse as their tenants/owners moved to other parts of the city (Porta Nuova CBD, City Life district, etc.). These spaces were then purchased by various hedge funds (Blackstone, Hines-Coima, Fonsun, etc.) that proposed refurbishment projects for new functions (retail, hotel, horeca), which in turn would influence the urbanity of the area. Until recently, this fragment of the city had been used by hundreds of white-collar workers during the day, but had remained empty in the afternoon and at night. These new functions will expand the daily life cycle of Piazza Cordusio and will attract people and users to a central area of city that used to be uninhabited at night.

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[75] See Textbox 2.
[76] The project, developed between 2011-2014 and entitled "RE-CYCLE Italy. *Nuovi cicli di vita per architetture e infrastrutture della città e del paesaggio*" ("New life-cycles for the architecture and infrastructure of cities and landscapes"), focused on the environmental, social, economic, and spatial impacts of the progressive urbanization of Italy and the parallel abandonment of certain territories,. For more info see:http://cercauniversita.cineca.it/php5/prin/cerca.php?codice=2010R4C2ZF
[77] Balducci et al., 2017a.
[78] Piazza Cordusio is a central square in Milan, close to Piazza Duomo. Traditionally, many financial functions have been located there, such as the stock exchange and the offices of many insurance companies and banks.

Another example is the new Apple store in Piazzetta Liberty, which together with a shop will include a new space for exhibitions and other events. As I said, the central core is still attracting investors, but we need to manage a form of "re-distribution" of the resources related to these operations. How can the presence of these actors benefit the rest of the city? This is an open question. While specific areas of the city may be under pressure, others remain in the shadows, unattractive to investors and inhabitants.

MP: The development of alternative forms of centralities also affects other spaces with different characteristics far from consolidated urban cores, particularly infrastructure nodes, the poles that represent an interface between different fragments of the city. Often, these spaces are not "central" in the geometric sense, but they are marked by a high level of accessibility, or located in strategic places, and can play a relevant role within a territory from a functional, hierarchical or symbolic point of view. Can you provide any examples of such spaces?

AB: We have several cases that represent how heterogeneous and rich this system of alternative centralities is. I found your focus on specialized centralities, like Bicocca in Milan or the agglomerations in peripheral areas of healthcare, research, and other functions particularly interesting. Other cases depend on different functions and their peculiar power to attract or to activate their contexts. As you pointed out in your recent book "Making Prestigious Places"[79], luxury has played an active role in the transformation of urban spaces located in areas far from consolidated historical cores. For example, the 2016 inauguration of Gucci Hub in via Mecenate in the southeast periphery of Milan. The 35,000 m2 compound hosts creative offices, marketing, and brand management and is the culmination of a regeneration process over the last ten years, with art galleries and TV studios moving to the area.

MP: There is also the Fondazione Prada venue, in southern Milan, close to the Porta Romana railway station. In an enclave of working class housing and dismantled factories, a global fashion brand transformed a former warehouse into an exhibition space. The architectural firm in charge of the project, OMA-AMO, developed a complex that includes a bar/restaurant, spaces for contemporary art, and production or event venues for cultural and creative industries. This then influenced the surrounding area, prompting the substitution or regeneration of abandoned areas, and the arrival of various activities that have changed the vocations in this sector of the city. Close to the Fondazione Prada area, a digital infrastructure system has been developed, fostered by the Milan municipality within the "Sharing cities" program[80]. This experimental program, developed following a specific planning vision, will retrofit buildings, introduce shared electric mobility services, and install energy management systems, smart lamp posts, and an urban sharing platform through engagement with citizens. This case is interesting because it merges bottom-up and top-down actions in the same area, developed by actors and stakeholders from different arenas and with varying degrees of financial power.

[79] Paris, 2018.
[80] More info available here: http://www.sharingcities.eu/

AB: It is interesting how different forms of centrality appear in locations that had previously been of no interest for central functions, especially for private actors. Yet now they attract some of the most experimental projects of the urban region. This is a novel situation and we will monitor its impacts in the medium-long term to see whether these spaces play an "activator role" for the surrounding areas.

MP: To some degree, centralities arise where stakeholders discover opportunities related to competitive and comparative advantages. In this respect, public actors play a key role, from both a strategic and regulatory point of view. Regulation influences the amount and the nature of the functions involved in a transformation. It also controls many aspects of the relationships among functions and between functions and the context. There are several aspects of alternative forms of centrality that the planning discipline and regional and municipal regulation do not consider, and that influence the overall quality of the projects (the quality of the urban landscapes created, liveability of public/shared spaces, permeability of borders, etc.). This is another open question, on which public actors could take on a more relevant role, but this has not yet been much explored.

AB: In your work on clusters of central functions, you recognized a set of spaces, defining precise geographies at a regional scale, and you recount several stories about specific places. This change of scale is interesting, because it involves the qualities of spaces and their relationships with their surrounding contexts.

Answering the emerging urban questions related to polycentric patterns of urbanized territories is difficult. As Balducci's work has shown, it requires a variety of practices, contributions, and conditions all working together, a combination that is infrequent and not always easy. Within this complex context and per the suggestions of Brenner, planners should adopt an open and plural approach to these issues, one that considers the implications with transcalar sensitivity. When dealing with multifaceted urban issues, planners must adopt a critical view, able to focus on specific topics.

Once the field and approach have been defined, the challenge for planners becomes how to translate them to local contexts and specific conditions. There is still a lack of protocols for this in the field of planning. Planners who are able to draw from real experiences and lessons learned in disciplinary debates, as suggested by Balducci and Bertolini (2007), may be able to fill this gap and spur the evolution of planning studies.

5.3   A REFLECTION IN MOTION

This book has reflected on the still on-going processes related to regional urbanization, producing a 'reflection in motion' using a dynamic context – the Milan Urban Region – which is characterised by blurring borders and increasing complexity.

This has also been the focus of Balducci's work, most recently in his description of the results of the PRIN Postmetropoli, which he describes as a "live photo", (Balducci et al., 2017a, p. 296), like those shot with a smartphone, where the picture shows what happened just before the shoot. With this image he points out the challenging task he and the research team faced in depicting the present and past transformations of urbanized territories and the complex phenomena that influence settlement practices, living and consumption habits, and inhabitants' quality of life.

Here, we have focused on urbanized territories and how their regional scale and polycentric patterns depend on both historical settlement practices and current dynamics, influenced by the confluence of global pressures in local contexts. These pressures impose socio-economic and technological transformations, which in turn generate territorial impacts and corresponding spatial reactions. The influence of such dissonances becomes evident when focusing on specific case studies.

In the Milan Urban Region, the progressive diffusion of central functions has contributed to the transformation of traditional vocations in its peripheral municipalities (productive, as in Sesto San Giovanni, Cinisello Balsamo, and Vimercate; and agricultural as in Rozzano, Assago, and Corsico), thus influencing socio-economic organization. But its new territoriality, based on the production and consumption of services, the innovation of specialized labour markets, and the progressive re-articulation of existing companies, has produced new demands as well as opportunities. There is a need for spaces and buildings to host these functions (offices for smart working, productive plants for industry 4.0, headquarters), a need of services and facilities that support these activities (research institutions, universities and advanced education clusters, technical training, specialized services) and living spaces for the people that work there. At the same time, policy-makers and planners must address the greyfields and "sleeping giants"[81] generated by the divestiture of buildings and functions in peripheral and central contexts, as in the central core of Milan (i.e. Piazza Cordusio) and other central areas of small-medium settlements in the urban region (i.e. the large container area of Bergamo). These transformations have implications not only for the physical infrastructure, but also for the political agenda in terms of the socio-economic conditions of existing populations. In the MUR, this includes the social impacts of the progressively increasing economic divergence of the local population. Moreover, the role of the city in global competition and its increasing attractiveness (for tourists, foreign investments, and resources) only partially activates the labour market for advanced professionals and services, predominantly reinforcing the processes connected with poor metropolisation (Garofoli, 2016).

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[81] Within the UrbaACT III network project "2nd chance" (2015-2018), the term "sleeping giants" is used to refer to underused buildings and areas in or near European city centres that have a negative impact on their surroundings, but which could represent local development opportunities. More information about this project is available at http://urbact.eu/2nd-chance

In Europe the ambitious hopes of Xu and Yeh (2011, p. 19) for new governance and planning capacities for polycentric city-regions remains more a challenge than a reality. One of the reasons for this is that the conditions that made their existence possible change together with the spatial traces of recent transformations. Research by experts like Balducci is important because it generates specific knowledge that is a necessary premise for finding solutions to governance problems, as noted by Lefebvre.

To achieve such a result in this instable scenario, approaches to planning must be flexible and open, focusing on relationships more than on administrative borders and out-dated institutions. According to this new attitude, the spatial scale of governance in urbanized territories would become a changeable dimension that planners can re-define according to local and regional needs and opportunities. Moreover, this plural and transcalar approach would allow planners to deal with several open challenges for polycentric urbanized territories, such as the coordination of territorial visions for new centralities, and the management of large transformations, their impacts, and their role as producers of urbanity.

The practice of the (post)metropolis - proposed in the work of A. Balducci - can be interpreted as a countinuous and mutual process of learning-by-doing and critical reflection on direct experience. Such a practice generates an original and unconventional contribution to the field of planning that has been discussed through the presented conversation.

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