

GRAN SASSO SCIENCE INSTITUTE
Urban Studies Doctoral Programme
Cycle XXXI – AY 2015/2018

**RIVERBANKS MADE BY WALKING:
UNDERSTANDING THE TEMPORALITIES OF URBAN NATURES THROUGH
ATMOSPHERES**

PHD CANDIDATE
Lucilla Barchetta

PhD Thesis submitted March 30, 2019

ACKNOWLEDGMENTS

I have devoted four years to this dissertation, my doctoral studies and academic activities. These have been extremely stimulating and worthwhile, but also very challenging for me. I discovered new places, walked new streets, visited new libraries. Above all, I met many ordinary people and researchers. They either encouraged my thoughts or criticised them. All these talks, encounters and travels have helped me enhance my awareness and intuition.

I want to express my sincere gratitude to and appreciation for my excellent supervisor, Prof. Andrea Brighenti, for the continuous support, patience, motivation and immense knowledge he conveyed.

Next, I am profoundly grateful to my co-supervisor, mentor and, especially, friend, Prof. Giovanni Semi, for his tireless commitment and support, for both my doctoral studies and related research since I earned an MA in Cultural Anthropology at the University of Turin. I could not have imagined a better mentor for my studies. I would like to thank him for taking the time to talk and walk during those four years. His guidance helped me at all times of doing research and writing this thesis.

In addition to my supervisors, my sincere thanks also go to Prof. Matthew Gandy, who gave me an opportunity to join the “Rethinking Urban Natures” project and its wonderful team, as a visiting scholar at the Department of Geography, at the University of Cambridge. I would like to thank him for the insightful comments and encouragement, but also for helping me widen my research perspective in various directions.

I am also greatly indebted to Prof. Dorothee Brantz, who gave me access to the Center for Metropolitan Studies at the TU Universität of Berlin. The writing of this dissertation would have been much more difficult without her precious support and confidence.

I would like to thank Laura Colini, Silvia Crivello, Liza Candidi, Maddalena Falletti, Michele Lancione, Alberto Vanolo, Francesco Chiodelli, Alessandro Coppola, who first enlightened me about the theme of my research and encouraged me to start studying this topic.

I am grateful to Andrea Hajek. I could not have imagined a better proofreader and *compagna* when writing this thesis. I thank her for helping me to meet the challenge of maintaining my writing voice.

I deeply thank my friends and colleagues Marco, Valeria, Panos, Grazia, Chiara and Dato—this PhD would have been unbearable without you. I truly appreciate all the love, laughs and warm words that have come from you in these years. I also wish to express my deepest love and sincere gratitude to my playmate, flatmate and favourite rat Enrico. Life would be a lot less funny, smiley and spicy without you.

Finally, I am profoundly grateful to my parents, Rosanna and Antonio, for their endless help and support in all those years of living far from my hometown.

TABLE OF CONTENTS

p. 4

LIST OF FIGURES

p. 9

LIST OF TABLES

p. 12

ABSTRACT

p. 14

INTRODUCTION

GREEN IS NOT ALWAYS PERFECTLY GREEN TEMPORALITY, DECAY AND URBAN NATURES

INTRODUCING URBAN NATURES p. 16

WHY URBAN RIVERBANKS, TEMPORALITY AND DEGRADATION? p. 19

RESEARCH HYPOTHESIS AND CASE SELECTION p. 22

Research hypotheses
Research design and methods
Why Turin
Case study rationale
Structure of the dissertation

p. 27

CHAPTER 1
THE POLITICAL ECOLOGIES OF ATMOSPHERES

IN THE NATURE OF CITIES p. 27

THE LIFE CYCLES OF METROPOLITAN NATURES p. 29

ATMOSPHERIC LIFE AND POLITICS p. 34

TOWARDS A POLITICAL ECOLOGY OF ATMOSPHERES p. 40

p. 45

CHAPTER 2
TEMPORALITY, NAURES AND CULTURES
AN ENVIRONMENTAL HISTORY OF TURIN

THE URBAN PROFILE OF TURIN p. 45

THE RIVERBANKS OF TURIN p. 51

POST-INDUSTRIAL RIVERSIDE INBETWEEN HERITAGE AND SCARS p. 57

WILL THE FUTURE OF TURIN BE GREENER? p. 61

p. 69

CHAPTER 3

THE MULTIPLE FATES OF MICHELOTTI PARKS

FRAGMENTS OF PARADISE AND PATCHES OF DECAY p. 69

THE MATERIALITY OF TERRAIN p. 71

AT THE CONFLUENCE OF LAND AND WATER p. 74

SEEING THE AIR p. 79

DARK ECOLOGIES p. 82

FLOATING FUTURES p. 86

p. 97

CHAPTER 4

SCRAPS AND STORIES FROM THE EDGES OF THE STURA

INTRODUCTION TO AN ARCHEOLOGY OF ENVIRONMENTAL CHANGE p.
97

THE GARDEN 'PLOTS' OF STURA PARK p. 99

RIPARIAN INTERSTICES p. 103

FEARS OF NATURE p. 107

THE ATMOSPHERIC DIFFUSION OF TOXICITY AND DISCOMFORT p. 110

AGITATED TOGETHERNESS, SHARED UNCERTAINTY p. 114

p. 124

**CHAPTER 5
FINDINGS AND DISCUSSION**

POLITICISING THE TEMPORALITIES OF URBAN NATURES p. 124

Michelotti Park
Stura Park

“WHAT IS HAPPENING IN TURIN?” p. 129

POLITICISING THE ATMOSPHERES OF URBAN PUBLIC NATURES p. 132

CONCLUDING THOUGHTS ON WRITING AND URBAN NATURES p. 135

p. 140

**APPENDIX
EXPLORING ATMOSPHERES ETHNOGRAPHICALLY**

AN INTRODUCTION TO WALKING AS PRACTICE AND METHOD p. 140

IT IS SOLVED BY WALKING p. 144

FINE-TUNING METHODS p. 146

Fieldnoting as a tangle of paths
Ethnographic doodling, sketching and drawing
Autoethnographic solo walks
Itinerant dialogues
Sit-down interviews and other walking conversations

p. 162

REFERENCES

LIST OF FIGURES

INTRODUCTION

GREEN IS NOT ALWAYS PERFECTLY GREEN TEMPORALITY, DECAY AND URBAN NATURES

n/a

CHAPTER 1

THE POLITICAL ECOLOGIES OF ATMOSPHERES

n/a

CHAPTER 2

TEMPORALITY, NATURES AND CULTURES AN ENVIRONMENTAL HISTORY OF TURIN

p. 65, FIGURE 2.1 – The city of Turin and the two case studies (Source: Barchetta 2019).

p. 66, FIGURE 2.2 – Key events in Turin (Source: Barchetta and Muscogiuri 2019).

p. 67, FIGURE 2.3 – The network of metropolitan natures (Source: Torino Atlas 2018).

p. 68, FIGURE 2.4 – The variety of urban open spaces (Source: Torino Atlas 2018).

CHAPTER 3

THE MULTIPLE FATES OF MICHELOTTI PARK

p. 89, FIGURE 3.1 – A topographic exploration of Michelotti Park (Source: Barchetta 2019).

p. 91, FIGURE 3.2 – A walk inside the old zoo (Source: Barchetta 2017).

p. 92, FIGURE 3.3 – The stonewall surrounding the old zoo area (Source: Barchetta 2017).

p. 93, FIGURE 3.4 – The pursuit for pets alongside the bank of the Murazzi

Waterfront and the central promenade of Michelotti Park (Source: Barchetta 2017).

p. 94, FIGURE 3.5 – Old zoo buildings (Source: Barchetta 2017).

p. 95, FIGURE 3.6 – The “little beach” and the path alongside the Po River (Source: Barchetta 2017).

p. 96, FIGURE 3.7 – Giò Park’s gate after and before the park’s renovation building where giraffes were previously kept (Source: Barchetta 2017).

CHAPTER 4

SCRAPS AND STORIES FROM THE EDGES OF THE STURA

p. 116, FIGURE 4.1 – A topographic exploration of Stura Park (Source: Barchetta 2019).

p. 118, FIGURE 4.2 – The ruin of the sand extraction site and the remains of "Tossic Park" (Source: Barchetta 2017).

p. 119, FIGURE 4.3 – The ruins of an old bridge and the "Stura beach" (Source: Barchetta 2017).

p. 120, FIGURE 4.4 – Spontaneous allotment gardens along the bank of the Stura River and the municipal allotment gardens of the Arrivore Park (Source: Barchetta 2017)

p. 121, FIGURE 4.5 – Stura South’s gate and the jersey barrier of the “Lungo Stura”(Source: Barchetta 2018).

p. 122, FIGURE 4.6 – Stepping into the Stura Park (Source: Barchetta 2017).

p. 123, FIGURE 4.7 – Shepherd Valentin and his caravan and the private allotment gardens of the “Lungo Stura” (Source: Barchetta 2018, 2017).

CHAPTER 5

FINDINGS AND DISCUSSION

n/a

APPENDIX
EXPLORING ATMOSPHERES ETHNOGRAPHICALLY

n/a

LIST OF TABLES

INTRODUCTION

GREEN IS NOT ALWAYS PERFECTLY GREEN
TEMPORALITY, DECAY AND URBAN NATURES

n/a

CHAPTER 1

THE POLITICAL ECOLOGIES OF ATMOSPHERES

n/a

CHAPTER 2

TEMPORALITY, NATURES AND CULTURES
AN ENVIRONMENTAL HISTORY OF TURIN

n/a

CHAPTER 3

THE MULTIPLE FATES OF MICHELOTTI PARK

n/a

CHAPTER 4
SCRAPS AND STORIES FROM THE EDGES OF THE STURA

n/a

CHAPTER 5
FINDINGS AND DISCUSSION

p. 126, TABLE 5.1 – The process of *degrado* and the multiple networks that activate it
(Source: Barchetta 2019)

–

APPENDIX
EXPLORING ATMOSPHERES ETHNOGRAPHICALLY

p. 156, TABLE 6.1 – Description of walking interviews realised at Michelotti Park
(part 1).

p. 157, TABLE 6.2 – Description of walking interviews realised at Michelotti Park
(part 2)

p. 158, TABLE 6.3 – Description of walking interviews realised at Stura Park (part 1).

p. 159, TABLE 6.4 – Description of walking interviews realised at Stura Park (part 2)

p. 160, TABLE 6.5 – Thematic categories used in the coding process

p. 161, TABLE 6.6 – Sit-down interviews

ABSTRACT

In recent decades, urban natures have formed illuminating grounds for the biophysical, aesthetic, political and socio-economic transformation of post-industrial cities. In the face of the looming threats of manifold environmental crises, there is an increasing sense of urgency, within multiple realms of public and political discourse, to enhance metropolitan natures. Indeed, today's growing importance of blue and green amenities addresses essential city services such as mobility, recreation and biodiversity. At present, the forms of urban natures are highly diversified; they include leisure spaces such as parks and allotments, feral spaces such as wastelands or spontaneous vegetation growing alongside railway tracks, as well as cemeteries and other interstitial spaces along watercourses. Hence, understanding the public value of urban natures requires a consideration of their socio-spatial complexity, their design features, management practices, property relations and accessibility.

Urban natures, however, are also characterised by their temporal dimensions. Yet, temporal concerns have rarely been systematically addressed in urban studies research. In order to address this shortcoming, the dissertation offers an investigation of the temporality of urban natures. Drawing insights on the literatures of urban political ecology and atmosphere studies, it explores how time operates within and constitutes life in two riverbank spaces of Turin – the Italian, prototypical one-factory-town – in uneven and multifold ways. Making use of walking, as a daily practice and tool for political critique, and unstructured informal conversations, the research develops an in-depth ethnographic approach to the study of the entanglements between socio-political processes and the sensory world, understood in terms of everyday atmospheres.

Departing from an understanding of environmental change centred on the social, the meteorological and the affective, the investigation focuses on the processes through which the issue of *degrado* (decay, blight) mediates human-environment relations, and unravels the ways in which riverbank spaces are shaped and framed by non-linear processes of development and socio-ecological change. In doing so, the research proposes an epistemological reassessment of the ambiguous notions of 'waste' and 'blight' space, by explaining how normative, temporal frames reinforce discursive divisions between urban and natural processes, and reproduce the moral geographies of human and non-human relations, which contribute in many ways to degradation. The research ultimately contributes to formulate a different language through which to capture the tenacious effects of processes of degradation and territorial stigma; it engenders a sensitivity to the politics of knowledge production, particularly in relation to multi-species life experience, and the landscapes and subjectivities that are created in the Anthropocene.

INTRODUCTION

GREEN IS NOT ALWAYS PERFECTLY GREEN TEMPORALITY, DECAY AND URBAN NATURES

INTRODUCING URBAN NATURES

The overall aim of *Riverbanks made by walking* is to examine urban nature in terms of a concrete and conceptual figure that can help understand the socio-ecological multiplicity of urban contexts. Urban natures are often viewed as something that is nice to have: a ‘good thing’. Recently, the idea that urban natures are something that we must have, and not simply an amenity, was broached in the field of ecological urbanism, and propelled further in the varied arenas of political and public discourse, cultural practices, art exhibitions and popular science media. Within the context of the accelerating impetus of environmental change, or what some have called the Anthropocene, the presence of natural spaces (vegetation and water) is seen as a necessity in cities confronted with climate risks and major urban changes (Kabisch et al. 2017).

Parks and gardens often predominate in the public imagery attributed to urban natures. However, they vary significantly. There is a quote by the urban historian Peter Clark, which describes how urban natures are indeed increasingly hybrid spaces that no longer fit the traditional distinction between *planned* natures (i.e. isolated parks, gardens, recreation sites, greenways, community gardens) and *unplanned* natures (i.e. areas of open access greenery covered by grass, shrubs and other vegetation). He says,

Open space is, of course, not always perfectly green: sometimes it is a frozen grey or muddy brown or wintry white, especially in Nordic countries. But is ubiquitous even in the biggest cities. For we must remember not only the parks and squares, garden suburbs and green belts, which have attracted most attention from historians and others. But also the infinite multitude of churchyards, cemeteries, hospital grounds, sport and school grounds, riverbanks and little strips of empty land at the end of the streets, as well as fields and woodlands on the edges of the invading Metropolis (Clark 2006, 2).

Indeed, ‘open space’ has now become an encompassing word that describes a broad variety of (more or less) green spaces, which express different aesthetic orientations as they require specific maintenance and design practices. It is important to stress that a distinction is normally made between urban natures and open spaces. Throughout the dissertation, though, I use the terms synonymously. In general, open spaces designate a specific type of urban nature

setting. Open space is, indeed, an urban design category associated with those pieces of land within the urban context that provide recreational sites, which are accessible to the public (Woolley 2003). Urban open spaces historically exemplify the link between socio-ecological concerns and planning and design schemes (Brantz and Dümpelmann 2011). For this reason, they can be considered both social and ecological solutions to specific issues concerning the regulation of living environments, and society at large (Certomà 2011). Conversely, urban nature denotes a varied mixture of elements, from the micro-level of the human body to complete ecological systems. The notion of urban nature can be recognised as the result of critical theoretical and empirical enquiry (e.g., among geographers, historians and others) concerning the separation between nature and the modern city or society, more broadly speaking (Heynen et al. 2006). Chapter 2 introduces the urban political ecology's contribution to this discussion, which I thought would prove very useful to strengthen the theoretical focus of this research.

It may seem unnecessary to discuss how urban natures positively contribute to the quality of urban life, according to their forms and qualities. At the same time, though, avoiding these arguments makes it impossible to understand why open spaces can represent the object of social and cultural claims. It has been well established that they provide distinctive ecosystem services, all the while reducing flooding risks and the carbon footprint of a city, as well as improving the quality of air (Lyytimäki et al. 2008). The benefits of open spaces are clear, and include psychological health and physical activity at different stages of life. The link between walking, open spaces and health has historical roots. Since the 1990s, however, there have been attempts to politically revive the importance of walking in open spaces, as part of a sustainable urban agenda and a growing preoccupation towards health costs. By providing restorative environments for a daily amount of exercise, urban open spaces reduce many types of health and mental diseases, such as stress, obesity and mortality (Wolch et al. 2014). They can also have social and political values as they provide public spaces for collective recreation, and improve social capital and active citizenship, while promoting the integration of different ages and ethnic groups (Low et al. 2005).

The question of why open spaces matter can be fully understood within the context of the long-term transformation of contemporary cities of the Global South and Global North, where open spaces become scarce and “intensely pressurised” areas (Walker 2012, 156), whose public values become central in land-use designation, planning schemes and grassroots activism. While the positive impact of natural spaces in proximate values represents a common wisdom among planners (Crompton 2007), the pressures of development, the maximisation of land values and the increasing population density can better explain why they also articulate new forms of socio-spatial exclusion. The creation of open spaces might, in fact, lead to environmental privileges (Park and Pellow 2011) or to the expulsion of socio-economic vulnerable populations.

Sarah Dooling (2009) has dubbed this “ecological gentrification”, although other, similar definitions have arisen in recent years (Gould and Lewis 2017).

The fragmentation and heterogeneity of the literature that examines urban open spaces is not random. It reflects the various attitudes towards natural environments at the interface of science, policy and practice (Thompson 2002). Various disciplines have contributed to the topic; they include landscape planning, urban geography, leisure studies, urban sociology, medical sciences, urban ecology and urban design. At the same time, the theorisation of human-environment relations has made substantial progress within the last couple of decades, resulting in a body of social research that has attempted to bridge the nature/culture dualism that rules the binary vision of the city versus the environment. Closer examination of this scientific literature suggests that urban open spaces can be observed from two different angles: one rooted in pragmatic intervention, the other in ethical framing and political critique. Firstly, open spaces can be seen as a stage for urban development manoeuvres. Within the contemporary urban project, there has been a renewed interest in the metropolitan landscape among professionals (architects, landscape architects, urbanists) over the past years, which has led to a new sensitivity towards open spaces in cities (Waldheim 2012; Lambertini 2006). The redesign of open spaces, with a view to improving human behaviour and society at large, becomes a way to reinvigorate the community and the public realm, and to reconnect people with the past and the specific qualities of place. It also promotes cultural diversity and respect for the human body, senses and emotions. Secondly, urban open spaces represent a battlefield to regain a form of justice, or a place for negotiating justice (Walker 2012; Checker 2011). In this regard, there is an increasing amount of literature, not strictly academic, which includes political papers and activist writings.¹ The discourse on the worldwide erosion of urban open public spaces as a result of privatisation, excessive policing and over-surveillance represents the corollary of the vision that contemporary urban open spaces are a place of contradiction (Staehele and Mitchell 2008; Low and Smith 2013). Furthermore, there is widespread concern about the decline in the quality and conditions of many urban open spaces, due in part to their low priority on the political agenda, at both national and local levels; and research has pointed at the negative sides of urban open spaces in terms of evoking fear of crime (Maruthaveeran et al. 2014).

¹ In the Italian context, a remarkable example is the case of the Ex-Snia in Rome. The Ex-Snia is part of a large industrial plant, which was established in 1917 for the production of viscose. Other than the dilapidated manufacturing buildings, the area also includes a park and an artificial lake, the result of a failed attempt to build a shopping centre in the area, in 1992. In 1995, a part of the industrial complex was occupied, leading to the formation of the social centre CSOA Ex-Snia. The latter has played a prominent role in preventing the privatisation of the site, and in forcing the Municipality of Rome to declare the area a public property. The history of these grassroots mobilisations are documented in the pages of the social centre’s website (<https://exsniamonumentonaturale.wordpress.com>). Writings include both activist and academic texts (Gissara 2018).

Interestingly, this extensive approach to urban open spaces denotes a renewed relationship between professional practice, public culture and the every day. But most of all, it shows urban open spaces to be places where it is possible to read the larger transformation of urban areas, and to recover from past mistakes. This brief introduction has outlined some of the key findings of research and public debate on urban natures. My dissertation draws on these overlapping debates about the uses and meanings of urban natures, and takes up the challenge to extend and enhance literature on the dynamics of urban environmental change by considering the tight entanglement between urban riverbanks, temporality and the embodied political ecologies of degradation.

WHY URBAN RIVERBANKS, TEMPORALITY AND DEGRADATION?

Some of the most interesting contributions to the dynamics of urban nature cultures deal with urban-riverine relations and riverbanks as geographical locations. The development of cities has always been linked to natural factors such as the presence of water, the topography and climatic conditions. Ever since the pre-modern period, urban environmental historians have acknowledged the vitality of riverscapes, in particular, although river histories often start in the nineteenth century (Castonguay and Evenden 2012). Riverbanks, in fact, are sites of vital importance when taking into account the entanglement between the biophysical transformations and socio-political processes that take place in urban environments, and how they evolve together (Rademacher 2011). It is not a coincidence that urban-riverine relations have inspired a wide range of fields of study and interests, including urban history, historical geography, water planning and environmental governance. In this sense, urban riverbanks are exemplary of what urban ecology means.

From the 2000s onwards, there has been a significant increase in the number of urban river studies. The urban historian Matthew Evenden (2018) explains this trend in relation to two aspects. Firstly, the growing number of river historiographies reflects a major concern with the environment and with environmental problems. The second reason is in a way connected to the first point, and regards the diverse attempts, internationally, to restore rivers and to rehabilitate the derelict urban waterfront into recreational and consumption sites. These projects have been developed as an answer to quality of life demands. To put it in a very general way, open spaces make better cities and

better cities provide a better quality of life to city residents, as well as positively influence the urban ambience (Bunce and Desfor 2007). However, it is not the sole aesthetic concern of beautifying cityscapes to drive such projects. Waterscapes also represent drivers of urban growth; they help sustain the city economy of many post-industrial cities, through the provision of cultural spaces of consumption, and also the promotion of civic boosterism, place marketing and cultural heritage discourses (Smith and von Krogh Strand 2011). Furthermore, this kind of landscape restoration initiatives are exemplary of a wide shift in planning practices, which recognises blue and green networks as ways of reinterpreting and designing urban systems as biological systems (Adams 2014). ‘Ecological infrastructure’ comprises this planning paradigm shift and re-inscription of nature. Furthermore, urban rivers as units of study offer a way to think about the relations between nature and culture, and to overcome nature-culture dualisms. Rivers have been damned, diverted and concretised. Yet, they embody the dynamism of natural forces, which evolve partly independently from human actions. Rivers defy human expectations; they flood and unpredictably change course (Castonguay and Evenden 2012). An additional element is the peculiarity of riparian ecosystems. Riparian vegetation is an important component and driver of wetland systems. Through the process of photosynthesis, plants convert energy from the sun into a form that provides the basis for aquatic and riparian food webs. The photosynthetic process is also essential for the health of wetland flora and fauna. It influences the microclimate as it can provide shading and encourage the deposition of sediments, which change water quality and clarity. Logs and other vegetative debris contribute to habitat complexity, and influence water flow and channel formation (Décamps et al. 2009). Considering “riverbanks to and from the city” (Castonguay and Evenden 2012, 4) thus offers a possibility to observe how cities and natures are constantly repositioned towards each other (Keil and Graham 1998).

By impacting the aquatic ecology, urbanisation has profoundly modified the relationships between cities and rivers. The intense and unregulated land occupation of the floodplain, to accommodate industrial developments and demographic expansion, has progressively increased the frequency and intensity of flood events. Although with geographical variations, global warming has increased extreme precipitations, leading to more flash floods and river degradation. But above all, considering riverbanks to and from the city allows us to reflect on the myriad spatio-temporalities and contradictions between industrial, political, social and ecological timeframes that take place in urban environments, and give shape to environmental changes by intersecting the local with the transnational level. Questions about the temporalities of urban riverbanks and, more broadly, urban natures are crucial to explore how complex and divergent temporalities structure urban life, and are enacted in cities. Even so, across the humanities and social sciences, there is surprisingly little research that explicitly problematises the relationship between temporality and urban natures. However, the following paragraphs acknowledge the

existence of available scholarship as a way of developing the research hypothesis of this dissertation.

From the 1980s onwards, the emergence of the sustainability paradigm marked a wider transformation in the conceptualisation of urban temporalities, by promoting the passage from a linear to a circular model of urban metabolism. Circular economies allow cities to self-regulate their relationship with natural resources and minimise the production of waste and “wasted places” such as abandoned and contaminated sites (Hall 2013, 1). ‘Brown-to-green’ sums up the timing of sustainable redevelopment, and temporal narratives of sustainability about saving the past and controlling the future. In recent years, as the geographer Matthew Gandy writes, the thesis of the Anthropocene has transcended “the political and temporal terrain of the sustainable development agenda by emphasising patterns of environmental change over a much longer period” (2018, 96). The ways in which open spaces materialise these shifting temporal frames is key to understanding the socio-ecological changes affecting the urban form.

Questions about time are pivotal for the examination of the evolving imaginaries of urban open spaces in scientific and public discourse, as well as of the transformations that regard the changing everyday uses of urban natures, their different rhythms and temporalities of belonging. Time also matters for an analysis of the evolution of legislative contexts, and how they impact, for instance, landscape restoration initiatives and the implementation of conservation policies. In particular, processes of ruination – due to which places experience neglect and degradation – have been given more sustained attention in scientific debates about the relationships between urban open spaces and environmental change. This is partly due to the relevance of urban disciplines that look at the material and discursive effects of the passage of time in urban spaces, by identifying these spaces with a varied terminology, which includes wastelands, ruins, terrain vagues and interstitial spaces (Brighenti 2016; Baron and Mariani 2014; Di Palma 2014; DeSilvey and Edensor 2012; Qviström 2012). These studies focus not only on the juxtaposition of territorial logics and social activities that produce decay, but also on the ecological specificity of the sites, which provide a fertile terrain for the development of urban ecology as a distinct field of study and also for the promotion of radical visions in landscape urbanism. Think, for example, of Gilles Clément’s *Tiers Paysage* and the rise of “wasteland aesthetics” as a new trend in landscape design (Lindner and Messner 2015).

Drawing on these insights, this research proposes to move from a focus on blight and wasted spaces as circumscribed locations and inert sites, to the dynamic transformations and socio-political processes that make and unmake the ruined form. Questions about how and when places become designated as ‘wasted’ and ‘degraded’ become vital to explore the intersection between human and non-human temporalities. Furthermore, the arising conflicts between

different meanings of time shed light on the production and contestation of environmental changes. The way processes of degradation are evaluated influences to a great extent the forms and processes of renovation and (non) intervention, by also proposing a politico-ecological reading of the ‘ugly’ aspects of everyday urban natures: the disservices and discomforts they often generate to urban ecosystems, in terms of safety-related concerns, depressing property values, biodiversity loss, security, health and aesthetic issues.

RESEARCH HYPOTHESIS AND CASE SELECTION

RESEARCH HYPOTHESIS

In light of these insights into the temporalities of socio-ecological change, two hypotheses are developed, which relate directly to the research questions. Firstly, this research puts forward the hypothesis that the environmental change of open spaces, and especially their material decay, leads to an emergent and unpredictable cycle of urban development and socio-environmental change. The latter makes and remakes the city through a series of colliding and overlapping spatialities and temporalities. The purpose of this research is thus to investigate how prevailing modalities of temporality, in contemporary scientific and public discourses, over-reduce the life of open spaces to a sequential and one-directional organisation of cycles: a linear timeline of progression from brown to green, and vice versa. In particular, I aim to show that the oppositional relation between desirable and undesirable open spaces is, in itself, a socio-cultural construction that attributes to open spaces – and the bodies that inhabit these – aesthetic, moral and discursive evaluations. The latter, in turn, model and monitor the lived experiences and political management of living environments. Secondly, the purpose of this dissertation, which is directly related to the ethnographic specificity of the research context, is to assess the fragmentation of Turin’s riverside landscape.

Using temporality as the focal point of observation, I aim to unravel the ways in which riverine ecologies are shaped and framed by non-linear processes of development. I therefore propose an ethnographic study that draws on the approach of the “political ecology of atmospheres” (Kazig and Masson 2015) – that is, the social and political entanglements with the sensory world – and on walking as a research method, in order to explore the life cycles of open spaces in riverside Turin, Italy, and the formation of post-industrial subjectivities. Of interest here is how people problematise, modify and challenge situations of

environmental change. Adopting the perspective of Edwards et al. (2012), I believe that the notion of post-industrial subjectivity indeed derives from an anthropological attention to the lived experience of post-industrial riverside Turin, and to the material, social and political context of that experience, which reveals a wide range of responses to environmental change.

The research endeavours to answer the following questions: How is environmental change constituted and experienced in relation to the discursive, affective and material components of open spaces? What concepts and categories do people use to describe/perform the way they sense, experience or feel environmental degradation? What patterns and themes can we detect in the way people define, experience, demonstrate and value the everyday atmospheres of riverbank spaces?

RESEARCH DESIGN AND METHODS

This dissertation follows a comparative case study design, with in-depth analysis of two riverbank spaces that are located in Turin (Italy). I used a combination of qualitative research techniques in the collection and analysis of data, primarily walking ethnography and interviews. The appendix describes in more depth the methods used in this research, and explains their appropriateness to the exploration of the three research questions. Regarding this point, it is important to stress that advantages of the walking method include not only the possibility of entering the research field site and developing research from the ground up; the walking method also strongly supports an atmospheric approach to a site, as motion offers great potential for engaging with the material and political qualities of sensory encounters.

Building on the “method of montage”, remodelled by the American geographer Allan Pred (1995), different research materials (e.g., archival documents, activist reports, field notes, images, newspaper articles) are employed in a prose that combines ethnographic accounts and personal commentaries.

In addition, I enriched the dissertation with a number of visual materials (e.g., photographs, charts, illustrations and maps). In particular, the function of photographs in the text is to show the locations that were particularly important for the research interlocutors and for the researcher. The size and shape of the photographs, then, reflects the format of an ethnographer’s notepad. Drawings are constitutive of the reflexive discourse related to this study. The appendix explains more systematically what the role of such materials is in the writing of the dissertation.

WHY TURIN?

During the twentieth century, the fourth largest city in Italy was known as the Italian prototypical one-company town. Turin was above all the home of FIAT, the symbol of the economic miracle of the 1950s and 1960s. Once the seat of the Royal House of Savoy, the city also distinguishes itself through the rigidity of its plan and the elegance that suffuses the refined architecture – buildings, palaces and squares – of the historic core of the city. Additionally, Turin is considered a ‘green city’, due to its many parks, the Po River and its tributaries. Over the last three decades, the city has undergone fundamental urban transformations, which have partly foregrounded the focus on the natural environments as a means to recover from the ghosts of the industrial past. In this regard, it is important to stress the fact that the Piedmont region is, indeed, one of the first Italian regions, which introduced, in the early-1980s, important legislative changes that led to the implementation of different nature preservation and enhancement plans across the region, especially in riverside areas. In Turin, however, the project of riverine change and uplift corresponded with a difficulty in materialising a systematic and homogeneous programme of waterfront rehabilitation. The picture that emerges is, in fact, not that of a linear cycle of urban and socio-environmental change stretching over a homogeneous space. Indeed, I refer to riverbank spaces as a symbol of this incongruity. Today, Turin is increasingly understood as a city torn apart by the industrial past and an uncertain future. The representations of the city, suffused with “ruin porn” connotations (Millington 2013), reflect these divisions.

The portrait given of the city in “Turin sinks” (*Torino affonda*), a short video by a group of local artists, is that of a city blighted and let down. The video was splashed in local media, after its publication on the web page of a national newspaper in November 2018. The initial shots offer a panoramic view of the Po River from one of the monumental bridges in proximity to the historic core of the city. The camera then moves to the Murazzi waterfront area, the former nightlife area of Turin, now closed down. Football stereotypes and a metaphorical representation of The Mole, the architectural symbol of Piedmont’s capital, plunged into a fish tank, alternate with the bird’s-eye view of the ruins of the Officine Grandi Motori, the old Fiat factory that produced big industrial and automotive Diesel engines. The city, filmed between late night-time and early morning, sleeps under a blanket of pollution and grey clouds. Devoured by a financial crisis and debt issues (partially as a consequence of the 2006 Winter Olympics Games), suffocated by air pollution, and let down by the major political changes that have traversed the city government after the rise of the Five Star Movement, Turin is at the heart of this research, the purpose of which is to capture the major changes to city life and environments in order to build a political reading of the atmospheres of decay that seem to envelop the city.

CASE STUDY RATIONALE

Building on the work of Lancione and McFarlane (2016), this study proposes a comparative approach that is “retrospective” and “processual”, and which focuses on the interrelationship between temporality and decay, by looking at two riverbank spaces: the Michelotti and Stura Parks. These riverbank spaces opened the gate for the long-term programme of riverine uplift. Although they are located within the same city, these riverbank spaces have little in common. This is due not only to the fact that they are shaped by different urban histories and spatial developments, in terms of both leisure spaces and natural landscapes. Additionally, they embody diverse social articulations of public space, as well as different configurations of waste and marginal space. Therefore, the aim of this research was not to compare how processes of decay worked in different contexts, but to analyse the human and non-human agencies and atmospheres that coalesce around processes of ruination (Lancione and McFarlane 2016, 1). It was only while conducting ethnographic fieldwork in the two spaces, separately, which allowed for an endless and intertwined operation of observation, description and comparison, that “correspondences” – both similarities and differences – emerged between the two parks (Ingold 2011).

Michelotti Park is located on the southern banks of the Po River, in proximity to the historic core of the city. The park, commonly known as the old zoo of the Municipality, marks the northern edge of the Borgo Po area, one of the oldest neighbourhoods of Turin. Borgo Po is part of the eighth administrative district of Turin (*Circoscrizione 8*), which includes San Salvario, Cavoretto, Nizza Millefonti, Lingotto and Filadelfia. Borgo Po is considered a neighbourhood of great architectural and natural features, which extends between the Po River and the hillside. Borgo Po is mainly a residential area, where elegant and aristocratic buildings mix with historic condominiums, bars and small grocery shops. Rental prices are generally high. Borgo Po has, in fact, a predominantly white upper- and middle-class population, with a high percentage of elderly residents. The bourgeois character of the neighbourhood is also visible in the absence of a migrant population.

Stura Park, the area around the Stura basin near the confluence between the Stura and Po rivers, is located within the north-eastern periphery of the city. The park is a network of open spaces connecting different neighbourhoods. These are all part of the sixth administrative district of Turin (*Circoscrizione 6*), which include Barriera di Milano, Barca, Bertolla, Rebaudengo, Falchera and Villaretto. In these areas, social mixed working-class suburbs developed over the course of the industrialisation of the city. Due to its specific geographical localisation, it is difficult to encapsulate the environmental change of Stura Park within a sole neighbourhood. The urban area played a pivotal role in the industrial development of Turin. The social and spatial implications of deindustrialisation and other urban changes have become visible through the

concentration of processes of territorial stigmatisation and environmental victimisation. Here, the percentage of the migrant population is higher than in other parts of the city. Indeed, the area has been significantly affected by different histories of migration, both internal and international. Today, the area is recognised as one of the most vulnerable districts of the city, in which lower life expectancy, high unemployment rates, urban security issues and lack of public services are exemplary of the increasing fragmentation of peripheral areas.²

STRUCTURE OF THE DISSERTATION

The dissertation is composed of six chapters. The first chapter presents the theoretical approach of the political ecology of atmosphere.

Whereas in the initial part of the chapter I review the research fields of urban political ecology and atmosphere literature, in the final part an attempt is made to build a dialogue between these different frameworks. Chapter 2 is dedicated to the environmental history of Turin. Here I describe the research context and unravel the incongruities surrounding the transformation of riverside Turin. Chapter 3 and 4 present the ethnographic exploration of, respectively, Michelotti Park and Stura Park. Each chapter is composed of four themed sections, which have been constructed both inductively and deductively. In chapter 5, finally, I discuss my research insights and findings, followed by conclusive thoughts on the research. The appendix describes the methodological aspects, self-reflections and analytical model used in the data analysis.

² The book *40 anni di salute a Torino* (Costa et al. 2017) represented an invaluable source for my analysis of the two case studies. It collects updated and detailed information about the interrelation between the city and public health issues such as mortality, environmental quality and access to health care. It identifies neighbourhoods and socio-demographic characteristics by specifying the role of individual-level variables, life courses and longitudinal dimensions, for a comprehension of the geographical heterogeneity associated with health in the city.

CHAPTER 1

THE POLITICAL ECOLOGY OF ATMOSPHERES

IN THE NATURE OF CITIES

The temporality of urban natures provides an interesting lens through which to observe the profound effects of socio-political restructuring on post-industrial cities in recent decades. Since the 1980s, the rise of landscape urbanism (Mostafavi and Najile 2004) has disclosed a new scenario for metropolitan change, which outlines the transition of many cities in the West from the industrial to the post-industrial age, and the opportunities generated by processes of industrial abandonment and urban redevelopment (Waldheim 2006). Within this context, the ‘urban landscape’ has therefore offered multiple potentialities to address issues vital to envisioning alternative futures, such as environmental quality and the wellbeing of life. As a response to the ecological risks of planetary urbanisation and the changes in worldwide, metropolitan infrastructure investment, leisure spaces such as parks and allotments, feral spaces such as wastelands or spontaneous vegetation that grows alongside railway tracks, as well as other interstitial spaces along watercourses, all form illuminating ‘playgrounds’ for the biophysical and socio-spatial transformation of the contemporary city. They are also fundamental components in urban design and regional planning imperatives, boosterism initiatives (Smith 2014; 2017; Clark 2004) and other ways forward to achieve the socio-ecological sustainability and resilience of the urban environment. They do so by providing “Nature-Based Solutions” (Kabisch et al. 2017; EU 2015) and by designing city systems as biological metabolisms (De Block 2016). Indeed, the concept of ‘green infrastructure’ has become ever more prominent in the last decades, and across different spheres of science, policy and planning (Benedict and McMahon 2006).

In this context, it is essential to develop infrastructural plans that may contribute to sustainable and liveable cities, with open space enhancement plans largely being presented as beneficial, for two reasons: because of their importance in urban ecosystem services, and because of the direct and indirect impact these have on public health, civic identity and the act of gathering in associations. In these debates, the language of sustainability too often affirms a prescriptive idea of ‘green as always good’; greening projects are considered to

have few downsides, and the benefits (aesthetic, ecological and recreational) become self-evident in order to promote ‘closed loop’ cities (Girardet 2014). Conversely, the broadening of the scope of environmental justice and scholarship on critical sustainability suggests that, if the benefits of open green spaces in making our cities greener and healthier are widely acknowledged, their inherent embeddedness in broader political and social relations is often underrepresented. The nascent debate on green gentrification has provided an opportunity to critically examine ecological urbanism, showing its unexpected consequences through various forms of environmentally-driven initiatives (Holifield et al. 2017). Empirical studies on this topic have shown that the unintended impacts of environmental improvement are a widespread problem in cities where the pressure of real estate markets, and the scarcity of available land, may turn environmental amenities into an element of social distinction and privilege (Anguelovski; Connolly and Brand 2018; Gould and Lewis 2016). Critical here is the extent to which the urban ecological fabric is constituted as a public good, and is thereby able to put a new future into being.

The recognition of the complexity of urban natures is also the focal point of biophysical studies of urban ecology, a field of research that has gathered some momentum in recent years and played a pivotal role in the policy investment in ‘urban green’, from landscape management to conservation biology (McPhaerson et al. 2016; Grimm et al. 2008). Scientific research has shown the complex assemblages of humans and nonhumans that make the city liveable, and which incessantly recreate interactions between species, habitats, the built environment, and biochemical and mechanical forcing. Urban ecologies are “recombinant” (Hinchliffe and Whatamore 2006); partly physical and cultural, they are imbued with symbolic meaning and represent sites of curiosity for social and scientific practice. Hence, urbanised ecosystems carry a profound historicity that perhaps only urban ecological scholarship has addressed in a distinctive manner, by raising the importance of the multiplicity of notions of time in urban natures. Indeed, urban natures are often, and for apparent reasons, studied from a spatial perspective. At present, the forms of urban natures are highly diversified, and promote different grounds for involving local communities. Understanding the public value of urban natures certainly requires a consideration of this spatial complexity.

It seems, however, that the temporal qualities of urban natures are rarely systematically addressed, including in critical scholarship on the politics of sustainability, with some exceptions: certain essays written, instead, from an ecological perspective (Kovarik 2013; Kovarik and Korner 2005); critical reflections on biodiversity conservation by cultural geographers (Lorimer 2016); new eco-materialist theories on the relationship between time and climate change and the increasing importance of non-human temporalities (Rossini et al. 2017; Neimanis and Walker 2014; Bastian 2011); critical reflections on time as a modality of power (Sharma 2013, 2014). This knowledge, however, has not been adequately connected up and researchers have missed other valuable

insights. At the same time, though, the intersection of nature with intense and unprecedented environmental changes also necessitates a reconsideration of its temporal qualities. The research that I draw on in this dissertation is precisely an intervention in the temporality of urban natures. Hence, in this chapter I aim to put forward my argument about the question of time in urban natures by developing an approach that I call, drawing on the work of Kazig and Masson (2015), the political ecology of atmospheres. To this end, in the first two sections I will adopt the critical lens of urban political ecology and atmosphere literature, so as to analyse how these intellectual traditions have addressed the way time operates in urban environments. In the third section, I develop a theoretical and empirical dialogue between these frameworks, using the issue of *degrado* (decay, blight) as a guiding thread and focal point of my research on the geographies of decay in riverside Turin (Italy).

THE LIFE OF METROPOLITAN NATURES

In the last three decades, the bodies of research that merge studies of the environment with those of urbanisation have made substantial progress. They have introduced critical questions regarding the social, political and economic dimensions of the transformation of global ecologies in the era now widely known as the Anthropocene: the label that denotes the current geological epoch, which is characterised by a human-dominated planet. The field of environmental humanities, in which these studies can be collocated, draws on wide-ranging streams of research such as cultural geography, anthropology, sociology, indigenous philosophy, environmental justice and eco-philosophy activism, biophysical sciences, human ecology, environmental history, political economy, visual culture and eco-art. This scholarship adopts different approaches to the environment; the move away from the Cartesian ‘nature/culture divide’, which rules the binary visions of the human versus the nonhuman, can be considered as the concern that unifies political, historical and anti-essentialist understandings of natural processes (Braun and Castree 1998). Scholars who promote this emergent field of research always insist on addressing ecology from a justice-oriented framework (Demos 2016). In these studies, the aim is thereby to develop an interdisciplinary type of knowledge that induces community-based and participatory action research methods, which have in turn widened the ability to respond to environmental transformations, and to assess and contribute to informed approaches to policy-making, in the widest sense of the term (Robbins 2012). It is an immense field of study, and a space of dialogue that operates not only between university disciplines, but also between nongovernmental organisations, social

movements, grassroots groups as well as other cultural practitioners (e.g. filmmakers and photojournalists). This approach has also helped to raise questions about the political meaning of words, and the kind of stories that emerge from different, global interactions with the environment (Van Eekelen et al. 2004).

In this burgeoning field of environmental scholarly praxis, urban political ecology (UPE) – with its specific focus on “metropolitan natures” (Gandy 2002) as socio-ecological constructions – has helped to pinpoint the basis of my research, and to examine how “socio-natures” (Swyngedouw 1996) become constitutive elements of urban processes. While the word ‘urban’ invokes an attention to the socio-ecological impacts of “planetary urbanisation” (Brenner and Schmid 2016),³ the word ‘political’ reflects the intersection between nature and capitalism by addressing the uneven distribution of the costs and benefits of environmental change according to multiple axes of difference (i.e. race, gender, age, class). ‘Ecology’ is not linked to the Chicago-style ecology,⁴ but is associated with the groundbreaking work of the German ecologist Herbert Sukopp (2008), who revealed the complexity of urban habitats while touring the “ruderal ecologies” amongst the rubble of pre-1989 Berlin;⁵ here he uncovered the unpredictable relationships provoked by biological diversity, urbanisation and processes of material decay. Focusing on various forms of socio-ecological processes, the approach adopted in UPE research shows that urban natures always result from the interdependencies of the everyday and its material realities. This includes biophysical processes (i.e. atmospheric variation; the role of water; the variety of plants, animals and soil formation), technological networks, governance structures, the associated cultural perceptions and practices, and the ideologies and representations through which nature is incorporated into public and political discourse.⁶

³ Scholarship in this field originated in a developmental field of study mainly focused on the rural contexts of what some called the “Third World”, which in turn emphasised an idea of the city as spatially bounded (Rademacher 2015). In the 1980s and 1990s, critical geographical perspectives emphasised the “un-bounding” and “defetishising” (Braun 2005) characteristics of cities, by highlighting the networks and links that make up the city’s open spatiality under capitalist urbanisation (Amin and Thrift 2002; Brenner and Theodore 2003; Massey 2005). In this regard, it is also important to acknowledge the significant contribution of environmental history to the writing of cities as ecological spaces (Lehmkuhl and Wellenreuther 2007; Douglas 2013).

⁴ Members of the Chicago School of Sociology, and especially Robert E. Park, considered inequality, socio-spatial mobility and social disorganisation as analogous to forests and plants, in such a way that social disorganisation was often compared to biological invasion and pathology (Hannerz 2001). Drawing on Gandy (2006), Paul Draus and Juliette Roddy argue that “social scientific writing on cities has historically evoked natural metaphors, while at the same time symbolically placing cities outside of nature” (2018, 2).

⁵ By ruderal ecologies, the anthropologist Bettina Stoetzer means plant communities spontaneously growing in disturbed environments such as “the cracks of sidewalks, the spaces alongside train tracks and roads, industrial sites, disposal areas and rubble fields”; “neither wild nor domesticated, ruderal communities depend on what is known as the edge effect and the juxtaposition of contrasting environments in one ecosystem (2018, 297).

⁶ *In the Nature of Cities* (Heynen et al. 2006) represents the manifesto of a broader political and conceptual approach. In addition, the literature reviews written by Heynen (2017, 2015, 2013),

One theme, in particular, lies at the heart of UPE: the degradation thesis (Robbins 2012), one of the main questions of urban political ecology research, through which it creates a distinct sensitivity to the temporality of socio-ecological transformations. My rather broad opening question is indeed situated in the effort to unveil how the intersection between time and degradation is conceived in this field of research. To this end, I use the terms “degradation”, “ruination”, “dereliction” and “material decay” loosely here, so as to see or catch the different nuances of processes of environmental change. Within political ecology framings, the theme of ruination generally refers to the progressive overexploitation of natural resources, and the consequential production of marginalised and impoverished subjects and territories.⁷ In the “first wave” of UPE literature (Heynen 2013), the emphasis on the production and meaning of urban natures revealed that nature is a material component of the urban space, intrinsically bound up with the spatial and temporal dynamics of capitalist accumulation (Kaika 2005; Swingedouw 2006). In this concern, the underlying notion of metabolism explains how nature is socially constructed and changes over time according to processes that are characterised by historical and geographical distinctiveness, and also by heterogeneous time-frames interactions. The latter, in particular, are visible in the work of Matthew Gandy (2002), and especially in his multitemporal reading of the political and ideological dimensions of nature in New York City’s Central Park.

However, the temporality of landscape is generally regarded as a cyclical process of development always dependent on dichotomies of change: the contrast between before and after, decline and progress, winners and losers. Progress and ruination identify, in fact, the geographical and temporal mirrors of the capital/labour relationship, which become visible through the cyclical and progressive intensification of processes of territorial evaluation and devaluation. The “seesaw of capital”, the theory formulated by Neil Smith (1984) and from which UPE analytical rendering has expanded, explains the geographies of capital accumulation by addressing a variety of processes of uneven development and neoliberal globalisation: for example, industrial extractivism, ecosystem despoilment, neighbourhood disinvestment and international trade policies that have brought ruin and devastation to many populations and territories. The metaphorical representation of the capital as a plague of locusts, which “settles on one place, devours, [...] moves on to plague another place” (2006, 202), very accurately describes the dynamism inherent in the ways capital etches itself into the landscape. This is perhaps why I am most interested in this approach, as it carries the foundational significance of the theory and its search for political possibilities and environmental justice politics.

Gabriel (2014), Zimmer (2010) and Keil (2005, 2003) outline UPE’s progress by linking precursors, conceptual arguments and cases across the Global North and South.

⁷ Soil pollution, along with deforestation, is one of UPE’s classic case studies, but there is, of course, a variety of cases that appear susceptible to this evaluation (for an overview see Robbins 2012).

Nevertheless, spatiality and temporality seem to remain fixed within the capitalist system and its structuralist forces. The peculiarities and possibilities of “plaguing”, as an activity whose intensity may vary over time, are not tackled directly. This materialist approach has been a source of inspiration for many scholars (both Marxist and non-Marxist) working in the field of critical urban research, who have used political economy, socio-ecological and symbolic explanations to analyse urban processes such as abandonment, gentrification and territorial stigma (Wacquant 2007; Quastel 2009). As mentioned above, this approach has come to dominate in the nascent debate on green gentrification, where emphasis is placed on the resurgent idea that green spaces may represent socio-spatial markers of disparity and privilege (Pulido 2000; Wolch et al. 2014). This is what has become known as ‘Green Lulus’, or ‘environmental displacement’, the most paradoxical aspect of the rehabilitation and allocation of environmental amenities following municipal regeneration initiatives (Anguelovski et al. 2018; Millington 2018).

UPE research has replicated the very problem it meant to criticise. There is a need to build an integrative perspective that overcomes the concept of an organic evolution of urbanisation, which cyclically reproduces the progress/decay antinomy and, at the same time, reproduces recurrent patterns of interventions in urban land markets and metropolitan change. Furthermore, as Bettina Stoetzer (2018) suggests, this duality between infrastructure and decay has reproduced, ironically, in a sense, a nature/culture divide in UPE research and, more broadly, in urban studies scholarship.

At the same time, though, the closer engagement of UPE with post-humanism, as well as the recent advances in urban ecology and cultural discourse, has led to a flourishing of scientific energies invested in the exploration of the changing meaning of nature, through interdisciplinary historical analysis. The focus on novel forms of landscape, such as urban wastelands and other spaces of vegetation that do not conform to normative visions of native or manicured landscape, has helped challenge the overwhelming emphasis on structuralist forces and the agency of human subjects. It has done so by highlighting the discontinuous temporalities and more-than-human geographies of socio-ecological relations in urban environments.

Brownlow’s (2006) insight into what he called “ecologies of fear” illustrates the extent to which ecology absorbs the historicity of places and subjects, in order to show how ecological restoration incorporates discourses of control that put marginalised communities at risk. Here, through the case of the Fairmount Park System in Philadelphia, Pennsylvania (USA), the author explores the context in which a growing ecological restoration agenda operated respectively as a response to the fragmented legacies of urban industrialism and to the decay of local ecologies in marginalised communities. Despite the central role the park played in facilitating cultural and social identification with the early African-American’s community history, the physical deterioration of the public park – which began in the 1960s – was inherited and reproduced in subsequent

restoration programmes. The latter emphasised the social and ecological, internal fragmentation of the park. In addition, the inefficient management of the area produced an uncontrolled environment that, consequently, exacerbated the image of the park as a racist ecology. Fear of crime in a mismanaged natural environment, and suspicion of environmental change, resulted in the exclusion of local women and children from what was, historically, a politically and socially viable public space.

Nate Millington, focusing on the study of visual representations of wilderness in Detroit, USA, suggests that images of nature reclamation in Detroit, produced by photographers and journalists, “are co-constructors” of Detroit’s “business of decay” (Millington 2013, 287). The formation of such romanticised and aestheticised, post-industrial imaginaries of decay reduces the complexity of ecologies, which in turn “neutralize the processes that are presently constructing Detroit’s landscape, most notably virulent racism and industrial restructuring” (ibid.). This confirms the fact that urban natures, from urban parks to wastelands, are incorporated into human settlements as circumscribed spaces that, in turn, embody the “socio-cultural construction of nature as either destructive or redemptive”, though always as separate and oppositional to the city (ibid.). Travelling to the city of New York, Millington (2015) observes that dereliction and abandonment produce de-historicised representations of nature that ignore and sidestep the political economy of abandoned sites, and the forms of violence that they have generated. Therefore, he cautions against a superficial consideration of urban wastelands and other underutilised spaces of nature in terms of symbols of a critical urban ecology.

Darren Patrick (2014) and Matthew Gandy (2012) highlight the forms of entanglements that exist between human and non-human temporalities, plants in particular. The authors demonstrate that these relationships are regulated between the life cycles of open spaces and the formation of urban subjectivities. While showing that ethico-political and ecological alliances exist between queers and plants, the authors also argue that heritage discourses – in the case of London’s Abney Park Cemetery – and novel forms of gay and ecological gentrification – in the case of New York’s High Line – become matters of human and non-human displacement, which pose a challenge to the depoliticised representation of ‘wasted’ and underutilised spaces. By building links between the temporality of weediness and historical, human subjects, they explain the cases of structured neglect, while at the same time challenging the managerial visions that regulate the division between desirable (beautiful) and undesirable (ugly) ecologies. In these instances, the historical richness of marginalised and impoverished spaces can have a subversive potential not just in terms of subject process formation, but also with regard to the politics of urban development and scientific practice. Most interestingly, this recent body of research has highlighted that a “brown/green antinomy” (Gandy 2013:2) naturalises an organic evolution of urbanisation that cyclically reproduces an opposition between “green fields” and “brown fields”: desirable, natural landscapes of

ecological, economic and aesthetic value versus undesirable spaces of abandonment, neglect and socio-ecological degradation. In particular, I claim kinship with Gandy (2016) when he argues that utilitarian approaches concerning unproductive places and their supposed “emptiness” narrowly frame urban open spaces, by exacerbating oppositional relations between planned (parks and gardens) and unplanned natures awaiting development (wastelands and other fragments of spontaneous vegetation). Progress and decay are temporal narratives that associate urban natures with time in such a way that they come to be seen as static and timeless. The key issue, then, becomes how the duality between “green fields” and “brown fields” outlines an opposition between temporal frames and politics that have cultural and material effects, which are elaborated through the aesthetic and affective experiences of shared time.

ATMOSPHERIC LIFE AND POLITICS

Building upon, and expanding from, the materialist roots of the field, UPE’s horizons have progressively incorporated embodied approaches to landscape (Doshi 2017). The theoretical and empirical attention to the body as a political site within the field of political ecology, more broadly, and in conceptualisations of cities in the subfield of UPE, in particular, has considered material embodiment a key arena for the analysis of the formation of environmental subjectivities in cities (Doshi 2018; Desai et al 2015; Choi 2011). Through the lens of post-colonial and feminist critique, these embodied approaches have addressed the limitations that persist in the epistemological analysis of landscape, by raising criticism of the constructivist-centered reading of ‘nature-as-a-text’ (Lorimer 2005; Howard et al. 2013). Research has thus highlighted how the overwhelming emphasis on the representative dimensions of urban politics, and their embeddedness in those global connections (i.e. institutions, discourses, laws, regulations and architectural forms) through which it is possible to ‘read’ socio-ecological transformations, also urges more nuanced conceptualisations of the intangible forms of power, which arise from the sensible components of ordinary life. The qualities of sensorial experience that human subjects, as individuals or collectives, sense in the world are sometimes lived and conceived as atmospheric experiences.

The notion of atmosphere has always been present as an undercurrent in everyday speech, aesthetic work and humanistic renderings of social life (Schroer and Smith 2017). The scientific lexicon assigns to the word ‘atmosphere’ a very precise way of describing the physical conditions that surrounds the existence of the planet (the word is derived from the Greek

atmos, vapor, and *sphaira*, sphere). Over the last two decades, the theme of atmosphere has been hailed with unprecedented success; it has laid the foundation for a body of ‘atmospheric studies’, aimed at advancing the study of lifeworlds as an interdisciplinary pursuit. The debate about atmosphere is vast and complex. Drawing extensively on Deleuzian-Spinozian philosophy, the notion of atmosphere has taken centre stage in academic studies encompassing human geography, philosophy, architecture, engineering and urban studies. It is, to a great extent, the broader fascination that springs from incursions into post-phenomenology and post-humanism in social science and humanities, which has determined a reorientation towards sensory landscapes and more-than-human worlds. The engagement with other-than-human ecologies has been combined, more broadly speaking, with the theoretical efforts through which social scientists have attempted, in recent years, to reconceptualise the social world. They have done so through a strong engagement with non-human beings, artifacts, natural forces, affective atmospheres and so on (especially in the works of Whatmore 2017; Haraway 2016; Viveiros de Castro 2012; Barad 2011; Braidotti 2011; Alaimo 2010; Bennett 2009; Latour 2005), and as a way to escape the human, subject-centered nature of the classical phenomenological approach to experience (Rose and Wylie 2006).

The large spectrum of philosophical studies, particularly the contribution of Franco-German phenomenology (Schmitz 1969; Dufrenne 1973), is visible in the number of voices that represent the key strands of this research; these have largely evolved independently of each other, in the UK and France, as the distinction between atmosphere and the Francophone work on ‘ambience’ confirms (Adey et al. 2013; Ash 2013; Stewart 2011; Thibaud 2014, 2011; McCormack 2008; Anderson 2009; Augoyard 1995).⁸ The literature has also benefited from, and seeks to develop, affect theories in human geography and non-representational theories (Brennan 2004; Thrift 2007; Anderson 2014), by shifting the attention from the individual perceptive level to the collective nature of public feelings, in order to grasp everyday atmospheres. The fundamental point in such investigations is to define what the phenomenon of atmosphere is, by describing when and where it begins. Gernot Böhme (2010) and Peter Sloterdijk (2011, 2014, 2016) successfully positioned themselves as the intellectuals who initiated the field of atmospheric studies. Their work is almost universally referenced. The approach formulated by Böhme (1993) is of particular importance in this dissertation, as he stresses the relevance of an ecological take on atmosphere to understand the linkage between bodily experience and the aesthetic qualities of the environment, or what has become known as the theory of ‘ecological aesthetics of nature’ (*Ökologische Naturästhetik*). Böhme thus takes aesthetics from the realm of art to that of the ordinary, where the essential thing is the way persons, objects and

⁸ The International Ambience Network develops research on urban ambiances to describe the sensory fabric of the city. It does so by organising research, design and teaching activities that stress the sensorial ways through which aesthetics, and ecological and sociological, urban transformations can be interpreted. The network also publishes the International Ambience Journal (<https://www.ambiances.net/home.html>).

environments make their presence visible and perceptible—“the ecstasy of things” is the expression that he introduces to describe how atmospheres radiate from one body to another. He does so by taking “the experience of the presence” at the centre of the investigation, putting the emphasis on the spatiality of atmospheres as a way to account their “in-between status with regard to the subject/object distinction” (Anderson 2009, 80). His research starts with a critique of the traditional understanding of the term nature in conventional European discourse, described as something “lying beyond human beings, as something to be conquered and as something to be dismissed as obsolete”.⁹ The challenge of a “new aesthetics”, Böhme (2010) suggests, is therefore to foreground the affective and aesthetic conceptualisations of *nature itself*, of which human beings are integral parts: not simply its reconfiguration into elements designed for human beings, such as parks (*nature for us*). Indeed, the significance of an ecological point of view arises from the urgency to consider the entirety of the world, while at the same time addressing the cultural meanings of nature under modernity, which may contribute to reframe the interplay between nature and people in the face of manifold environmental crises.

What is lacking, nonetheless, are more historical and contested conceptualisations of the micro-material practices that can convey socio-political criticism, crucial for envisioning different ecological imaginaries. The overwhelming emphasis on the philosophy of the concept of atmosphere has generated much discussion, about what kind of new insights this concept might offer in scholarly practice. This approach carries the risk of presenting atmospheric dimensions as objective and a-historical social forces, “portraying people and other living beings as passively moved rather than as also actively involved in constituting atmospheres”, Schroer and Schmitt (2017, 5) observe (see also Wetherell 2012; Edensor and Sumartojo 2015). Pink and Sumartojo argue that the problem with existing scholarship on atmosphere is that the latter is described

...In a way that suggests it has a sort of uniformity or a discernible shape that draws things together into a holistic experience. It suggests one could be in or out of an identifiable atmosphere, fixing its particular configuration in time and place, when, as we argue throughout the book, the experience of it happens ongoingly and in emergence (2018, 16).

In the words of the anthropologist Kathleen Stewart, atmosphere “is a force field in which people find themselves” (2007, 452), but actively respond to it and negotiate the material and social conditions upon which this force field is made and unmade. Trying to grasp what is part of this ‘force field’ therefore, and above all, requires paying special attention to the moments, frictions and scenes of ordinary life. The question of movement is at the heart of the endeavour to understand how this “force field” carries together these material

⁹ Gernot Böhme in Wang, Z. (2014). An Interview with Gernot Böhme. *Contemporary Aesthetics*, 12(1), 4.

and social dimensions. Movement helps register differences, which might be experienced as a shock or a tension, and draws attention to the ways in which the ethics and politics of inhabitation become situated and felt. This point turns out to be central in my work, as it demands a close ethnographic attention to the forms of attachment and emergent modes of urban socialities, which define everyday interactions and temporal transformations in urban environments. In this sense, research-based practices are vital for the understanding of the aspects that characterise atmospheres in terms of experiential and conceptual environments.¹⁰

In writings on atmospheres, the use of the term ‘environment’ is extensive and describes the configurations of the temporal and spatial infrastructure that govern the flow of ordinary life. Tim Ingold (2011) calls it the “weather-world”, that is, the environment we dwell in: one in which feeling bodies and the weather, including the earth and sky, cannot be neatly separated. Thus, the ever-billowing clouds of smog and extreme heat waves, the visible traces of surveillance camera operators in public space, the animated ambience that circulates in the course of a demonstration, or the somber impression of an unfinished building, are all phenomena that cannot be fully grasped without immersing in actual research sites and everyday environments, where people, things and mundane contingencies constitute atmospheres (Pink et al. 2015). Nevertheless, the theme that emerges from these theorisations is the distance between theoretical and empirical work, on the one hand, and methodology, on the other. As Pink and Sumartojo (2018) argue, the problem, in fact, is not just how we might deal with different intellectual explanations of the sensory enigmas of the social, but how we do research about, in and through atmosphere in practice. In the absence of an incisive dialogue between theory and research practice, there is the risk of creating slippages between conceptual interpretations and the localised, or subjective, ways of knowing atmospheres. One implication of this is that we explore atmospheres ethnographically, an approach that I endorse and that constitutes the dominant line of thinking about atmosphere throughout my dissertation.¹¹

Furthermore, whilst finding inspiration in this approach, I am also very keen on highlighting the importance of accounting for the various other ways in which atmospheric experiences can be described (including by what people see, touch,

¹⁰ A good example is Pink and Sumartojo’s (2018) research on atmosphere in an inner city market in Melbourne, which has been operating since 1878. As the area became the target of an improvement plan by the local government, a team of researchers from the Digital Research Centre at Melbourne’s RMIT University investigated the atmospheres and intangible values that make the market today. One of the key findings of the research was that people expressed opposition to the development plan by arguing “that something of the unique heritage of the market would be degraded, that it would lose its vibe”. <https://www.melbourne.vic.gov.au/building-and-development/urban-planning/local-area-planning/queen-victoria-market-precinct-renewal-plan/history-heritage/pages/ethnographic-research-project.aspx>

¹¹ In the appendix I outline the methodology and methods that I used and combined in my ethnographic research.

hear and smell), notwithstanding the difficulty of expressing these through rational explanations. Indeed, I claim kinship with Pink and Sumartojo, especially when they argue, drawing on Tolia-Kelly (2006), that “any understanding of atmospheres must be empirically grounded in the categories by which people might understand their experiences as atmospheric *in their own terms*” (2018, 4). Hence, the analytic work on atmosphere consists of multiple processes of translation from and to different linguistic registers, which include the words relating to ordinary people, experts and political vocabularies, as well as those of the researcher.

The emphasis on the significance of listening to, and telling, stories is at the heart of the approach developed by the anthropologist Kathleen Stewart (1996). Stewart grounds her ethnography of the people living among the ‘debris’ of West Virginia’s coal mining industry in the micro-material gestures and talks of everyday life, inviting us to discover the potential of ‘writing atmospherically’, which is based on in-depth descriptions of *what happens*. In her subsequent, ethnographic descriptions of ordinary affects (2007, 2011), she is thus able to challenge the non-representational character of atmosphere by combining reflections of politics and culture with *just talks*: “hanging out with people and stopping to talk to people on the street” (1996, 7). Stewart’s work also contributes to make explicit one of the most interesting insights that we can gain from empirical research on this issue: the idea that atmosphere is fundamentally a temporal quality of people and places that continuously change and dilate space.

As a component of the aestheticisation and regulation of reality, the manufacturing of atmosphere can produce collective feelings as well as particular experiences of shared time, by shaping the ways and contexts in which people feel and use the flow of time. From the 1960s onwards, research in the fields of engineering, architecture and design has engaged with the ‘staging’ and making of atmospheres in leisure spaces, where the regulation of public behaviour and sensorial experience served to persuade consumers and visitors to spend time in these spaces, and with the following objectives: for commercial purposes (Böhme 2016; Pile and Gillmore 1999); for the communication of a certain idea of communal space through the creation of “comfort bubbles” (Pavoni and Brighenti 2017); for the production of diffuse regimes of governmentality in urban public spaces (Adey et al. 2013; Thibaud and Pichon 2017); for the transference of different kinds of historical knowledge by creating a particular ‘museal’ perspective on the world in exhibitions (Bjerregaard 2015). Gernot Böhme (1993) also gives the example of the theory of garden art, and the significance, in such a context, that landscape aesthetics and design components take on in relation to the formation of particular qualities of feelings. These can make us feel good or not good, decide to stay in a place or go to a different one, while at the same time “legitimizing particular forms of speech” in which, for example, a park is called serene or frightening (1993, 122).

Nevertheless, uncertainty persists with regard to the extent to which users share the spatial and temporal qualities of atmosphere. From this kind of perspective, the paradox that emerges lies not only in the contradiction between the notion of staging an atmosphere, and the idea of atmosphere as circumstantial phenomenon; it also refers to the reduction of the temporality of the urban infrastructure, and, in particular, to a succession of events identified or created on the basis of a specific set of characteristics. Edensor (2012, 2015) and Bille et al. (2015) argue that the atmosphere of contemporary space, orchestrated or not, is co-produced by dwellers, officials, urban planners and designers, or artists, but that it is not reducible to a succession of events, favourable occasions or ephemeral processes. Political agents and public imaginaries, along with material arrangements, play a pivotal role in influencing the formation of a particular type of sense of place. Nevertheless, users, too, share and play an active role in this process by continuously exchanging cultural values and norms, and repeatedly attuning to mundane contingencies. As Sara Ahmed (2010) suggests, atmospheres are actively created and need work to be sustained. Additionally, they are “a-chronological” (Pink and Sumartojo 2018, 124), and are thereby characterised by an overlap of heterogeneous time-spaces that unfold through social interactions, and which diffuse forms of power struggles by blurring the division between the representational and non-representational.

That said, working through atmosphere offers a way of experimenting with alternatives to linear and “palimpsestual” conceptualisations of temporality, in which the present is merely the sum of past episodes (Harvey 2013, 154). As Tim Edensor (2015) observes, acts of anticipation and recollection – which take place through remembrance of past collective, and individual, experiences – can change atmosphere over time. In fact, these acts of memory can vary, as Bissell and his colleagues (2010) demonstrated when they explored how affective atmospheres erupt and decay in the space of public transports. Stephen Closs (2016), instead, has addressed the question of duration, by analysing how atmospheres of nationalism were temporally and spatially maintained in the course of the London 2012 Olympic Games. Atmospheric research, however, lacks consideration of the social, political and moral issues that result from the sensory and physical transformations of living environments, a consideration that may highlight the value of the atmospheres in which these transformations take place. How can atmospheric research convey issues of social and political criticism? Building on these questions, in the last part of this chapter I will question the possibility of reconciling critical approaches to socio-ecological change with the emergent modalities of urban life.

TOWARDS A POLITICAL ECOLOGY OF ATMOSPHERES

Linking together urban political ecologies and the ecologies of atmosphere entails creating a space of theoretical and empirical dialogue between two different, yet potentially complementary, fields of research. Borrowing from Rainer Kazig and Damien Masson's insight¹², I call this approach the "political ecology of atmospheres", and the issue of *degrado* (decay, blight) – in relation to urban natures, and particularly to post-industrial, riverside Turin – is the context in which I experiment with this approach. To this end, my purpose in this last section is, first, to present a short history of *degrado*, and secondly, to ask what an atmospheric-based critique of *degrado* could do for an interpretation of the dynamics of environmental change and material decay in urban natures. The distinction between decay and blight may be important; in what follows, though, the terms are considered synonymous of processes and acts of ruination in relation to urban landscapes. As Dillon pointed out, the affirmation that we live in a time of ruination can be true for all epochs, but it is especially true for the current era; the latter has seen "what appears a distinct flourishing – in the realms of global events, popular culture and the work of visual artists – of images of decay and catastrophe" (2012, 10). From the 1960s onwards, the ruinous effects of capitalist urbanisation, industrialisation, wartime devastation and natural disasters have become visible through the proliferation of wastelands and other toxic sites. This has shown the process of ruination to be central to global environments. The aftermaths of industrial development, along with the structured neglect of territories, has represented places from the Global North and South as 'deteriorated' bodies, with the populations that dwell in these places mainly being regarded as 'wasted' and 'abandoned' too. In the face of climate change, the spread of planetary environmental risks, wastes and toxins, in connection with issues of social exclusion, has enlarged the spectrum of ruinous forces and agents that provoke processes of decay, also affecting the elusive entities of air and soil in human-environment relations (Gray and Sheik 2018; Stoetzer 2018).

The "contemporary *Ruinlust*" (DeSilvey and Edensor 2012, 465) is undoubtedly different from the ruinophilia depicted in Western Renaissance art and beyond, from the Baroque reflection on worldly vanitas to Romantic acts of mourning

¹² Rainer Kazig and Damien Masson (2015), in the subparagraph titled *Dispositions Différenciées*, insist on the need to consider atmospheres as political and ethical matters. Jean-Paul Thibaud (2014) also has addressed the political aspects of atmospheres in relation to urban planning and design. In conclusion, it is important to mention the session at the 2019 AAG annual meeting, which is exactly on the topic. The title of the session is *Towards a political ecology of ambiances/atmospheres*, and is organised by Damien Masson and Rachel Thomas Bouchon (<https://aag.secureabstracts.com/AAG%20Annual%20Meeting%202019/sessions-gallery/23210>).

for a lost past. Nevertheless, obsessions with ruination persist in scholarly research on ruins and derelict spaces, which has significantly increased over the last decades also in tourism projects and major art exhibitions (e.g. the Tate Modern's 2014 *Ruin Lust* exhibition). Looking at the issue of *degrado* through the lens of ruin scholarship,¹³ several intersections with the cross-disciplinary study of ruined, post-industrial landscapes emerge (from factories and military installations to urban wastelands and edgelands). As we shall see, however, the theme of *degrado* retains power and specificity in the extent to which it not only addresses processes of ruination with a distinct geographical location (Italy), but it also interweaves imaginaries of decay working at different temporal and spatial scales. As the American curator and writer Robert Storr says, "no country is richer in ruins and therefore richer in dreams than Italy. It has everything: classical Greece, classical Rome, the Baroque era, the modern era" (2018, 41). Different imaginaries nurture the notion of *degrado* in ways that link the common perception of Italy as a repository of ancient ruins with a particular kind of ruin imaginary, which developed in the 1950s, 1960s and 1970s, and which continued in the 1980s and 1990s, up to the present. This ruin imaginary results from a specific kind of ruined forms, namely the 'incomplete ruins' (*Incompiuto*),¹⁴ that is, the buildings and architectures that were never completely finished, and which became representative of the defacement of the Italian landscape, associated with episodes of political mismanagement, corruption and organised crime. In this regard, Giorgio Bertellini (2012) very accurately explains how contemporary Italian cinema, especially historical costume dramas, documentaries or high-class melodramas from the 1990s and 2000s, also exposed the forms of spatial and social *degrado* caused by unchallenged logics of profit, civic disregard and moral corruption.¹⁵

In contemporary Italy, *degrado* – considered as an all-encompassing term, which aesthetically identifies persons, things and physical environments as revelatory of processes and settings of defacement – stands out as a particularly meaningful urban issue. The term stands for neglect and exhaustion, and is antonym of decorum; the latter has its roots in the Renaissance theory of

¹³ DeSilvey and Edensor (2013), the most prominent scholars engaged in discussions about dereliction in the field of human geography, have reviewed the state of the art on ruins by focusing on three key themes: firstly, the framing of ruins as counter-sites of resistance; secondly, the relationship between ruins, memory and temporality; and thirdly, the potentials of ruins to engender new appropriations of lived environments. The volume *A short history of Decay* (2011), edited by Brian Dillon, is a collection of essays on ruins and decay, which includes documents of contemporary art, philosophy, sociology and urban theory.

¹⁴ In 2007, a group of artists, called Alterazioni Video, documented about 400 unfinished public works throughout Italy (i.e. schools, roads, dams, theatres and sport centres), most of which are located in the southern part of the peninsula (especially in Sicily). For this reason, these artists labelled this phenomenon as an architectural style: *Incompiuto Siciliano*. The art collective recently published the book *Incompiuto. The birth of a style*, in which they explore, from a ruin perspective, the issue of incompleteness as an important contemporary urban theme both in Italy and abroad (Arboleda 2018).

¹⁵ Examples of this environmental narrative include Martone's *Noi credevamo*, Guzzanti's *Draquila* and even Guadagnino's *Io sono l'amore*.

architecture, and refers to the main ideas about an organised and beautiful urban setting, “the fit of expressible means to expressed content” (Tafuri 1968). Usually, the word *degrado* is known throughout the country in discussions about ‘urban decorum’, a theme that has nowadays gained new value and importance within the context of security culture (Bukowski 2019). Understood as the direct opposite of a humanist ideal (i.e. decorum), *degrado* then extends to include the social, political and moral issues that are provoked by the landscape transformation of living environments. In the name of security and urban decorum, local mayors have imposed a set of policies to regulate public behaviour in public space via the application of municipal ordinances, most of which have been conceptualised precisely as measures against *degrado*. Within this context, the question of *degrado* has shown what appears to be a distinct ability to convey a broad variety of issues regarding urban life. The works of Wolf Bukowski (2019), Carmen Pisanello (2017) and Tamar Pitch (2013) and have helped to understand how the ‘ideology’ of urban decorum has taken centre stage in the politics of the city, as a tool and widespread process of power that moves across different scales. As Moroni and Chiodelli (2014) suggest, ordinances first appeared in Italy in the mid-1800s, as extraordinary measures to tackle unexpected events such as earthquakes and floods, and to block access to the affected areas. With the approval of the so-called ‘Security Package’ (Pacchetto Sicurezza) in 2008, municipal ordinances have consistently increased in the areas of interventions that address concerns of urban security (i.e. sex work, vagrancy, camping and informal selling). Furthermore, local ordinances have granted more power to mayors who have started using these measures in order to legitimate decisions on the basis of concerns of public order and of “substantive conceptions of the good life”, associated with certain lifestyles that apparently favour illicit activities, and which may degrade the image of particular places (Moroni and Chiodelli 2014, 4).

As Maurizio Ambrosini (2013) has pointed out, local mayors have imposed bans on night-time gatherings in public open spaces and early closing times for commercial activities, especially ethnic shops that stay open until late. Exclusion measures have also been put in place, to curb access to public gardens and parks, and to prevent people from sitting on benches, eating on the grass and so on. The ‘Orlando and Minniti Law’ that was approved in 2017, along with the modification introduced by the ‘Salvini Decree’ of 2018, has made further steps towards the implementation of hardline measures on security, heightening the exposure of vulnerable populations (especially migrants, women and homeless people) to penalisation and marginalisation.¹⁶ The proliferation of digital

¹⁶ In this regard, De Giorgi (2002), drawing on the work of Wacquant (2000), points out that these instruments have their roots in ‘quality of life policing’: introduced in the USA in the 1980s, these measures aimed to legitimise neoliberal agendas of urban transformation and ‘hygenisation’ of the cityscape. They first appeared in Italy within the context of progressive policy debates, as an alternative to the right-wing regime of hardline precautions. Nevertheless, the Italian context is also emblematic of the paradoxes of the post-political era, as confirmed in the narratives of populist movements such as the Northern League (nowadays just called the League) and the Five Star Movement. The latter, in particular, while initially focusing on issues that pertained to the

spaces, as a means to tackle the issue of *degrado*, has had an enormous influence on the creation of particular atmospheres and collective feelings of ruination in urban contexts. For example, Carmen Pisanello's discussion (2017) of the blog 'Roma stinks!' contributes to make explicit how *degrado* is a shifting assemblage of practices and affects that are at once abstract and concrete: they are more fractious, heterogeneous and unpredictable than symbolic meanings. Any scientific understanding of *degrado* must therefore take place within the situations of ordinary life, where urban form turns out to be a fundamental, material and aesthetic, dispositive of social and environmental control, which is not always clearly visible but always present. Pisanello also highlights how *degrado* not only operates through tangible structures, actions and materials, but also in ways that are vague, nebulous and not easily locatable in advance. The atmospheres of urban natures provide details and examples of the manners in which *degrado* can "impress feelings" and fix bodies into "objects of feeling" (Ahmed 2004). In doing so, the issue of *degrado* describes a process that works atmospherically to connect human/non-human lives, things and environments beyond the boundaries of circumscribed units of space.

In the Italian context, *degrado* is represented as a disease attacking urban spaces, and also the vegetation that we expect to see nurtured. Lawn grass growing faster in the city's public spaces, from urban parks to roadside vegetation, has become the object of accusations and the expression of a general uneasiness. Here, the desired maintenance of public open and green spaces has played an important part in the recourse to decorum as a civilising mechanism for 'ugly' natures. The case of unmowed lawns has highlighted the aesthetic roots of *degrado*, as a particular atmosphere that envelops and presses upon bodies, by giving the impression of a city "gone wild" (Davis 2002, 384). It is generative of collective feelings, and produces a common perception that something suspicious is emerging, which poses a threat to environmental quality based on substantive ideas of the good and the beautiful. *Degrado* becomes a means of keeping a distinction between what is right or wrong. It creates boundaries and walls that gather groups around spaces of cultural identity and consumption, by building un-anticipated analogies between human/non-human bodies and place, and by situating urban spaces at the centre of narratives of nationhood and social control. In this sense, the political ecology of atmospheres can offer an empirical starting point for the reflection on urban natures, understood as a set of relationships and "ways of imagining the practice of inhabiting a place" (Brighenti 2010, 217) that contribute to show the fragmented nature and contradicting temporalities of the ecological (Rademacher 2015).

Thinking about *degrado* through the atmospheric life and politics of mundane social life thus entails, above all, moving across different scales, from the

'left', has now shifted to the right, imposing xenophobic and restrictive measures on migrants and refugees.

intangible and less perceptible of the micro-level – that is, body engagement with the biophysical dimensions of space – to the realm of public and political discourse, both nationally and globally. This extends to include the multidimensional geographies of tension and resistance, on the widest local, national and global scales. The intellectual dialogue between these bodies of research thus proves helpful to extend the scope and understanding of the temporalities of urban natures and processes of degradation. Moving in this direction requires resituating urban studies scholarship in the field of ecology, in such a way that ecological and social elements are studied as a connected whole, and environmental change comes to be seen as a transmaterial, temporal frame stretching between present, future and past. That said, my purpose is to study urban natures through the political ecology of atmospheres that envelops areas of post-industrial riverside Turin. I therefore propose an ethnographic study that takes objects of blight/ruination as a starting point, by way of challenging the uniform and monolithic representation of *degrado* as an atmosphere. Rather, I analyse *degrado* through the different realms of discourse and practice that participate in the formation of human-environment relations in the riverbank spaces of the Italian, a prototypical one-factory town. Using temporality as the focal point of observation, in the following chapter I will unravel the ways in which riverine ecologies are shaped and framed by non-linear processes of development, which provide the ground for an interpretation of riverside Turin as a fragmented type of landscape.

CHAPTER 2

TEMPORALITY, NATURE AND CULTURES AN ENVIRONMENTAL HISTORY OF TURIN

THE URBAN PROFILE OF TURIN

“The fiery red Torino rolled to the curb, we hit the pavement ready for action”
Earth (2006). *Phase Three Thrones and Dominions*

“...perché essa (Torino) non è una pianta di serra, che cresce e produce fiori e frutta solo quando un esperto giardiniere la mantiene nelle volute condizioni di calore e di umidità; ma è una pianta robusta, che ha radici profonde e salde nel terreno, sì che può sfidare serenamente i geli e le tempeste. Durante i mesi invernali perde le foglie, ma appena il sole primaverile scioglie le nevi ecco che cosa rivive con nuove foglie e nuovi fiori, allargando le radici e i rami frondosi sopra più vasto terreno”
Gribaudo, D. (1954). *Torino e la sua collina*

Turin, for centuries the kingdom of the Royal House of Savoy, is a city in the north-west of Italy: capital of the Piedmont region, nestled between the Alpine Wall and the hills surrounding the plain of the Po River. The city's hydrographical network is based on the basins of four rivers, namely the Po River and its tributaries: Stura di Lanzo, Dora Riparia and Sangone. Turin is the fourth-largest Italian city in terms of population, totalling nearly 900,000 inhabitants (ISTAT 2018). During the twentieth century, the city was known as the archetypal Italian 'one-company town'. Indeed, the FIAT car factory intensely informed the spatial, economic and social dimensions of urban space (Bagnasco and Olmo 2011). By the early 1960s, Italy had been through a decade of accelerated economic growth, commonly known as the 'Italian miracle'. In this context the city was nicknamed the 'Italian Detroit' (Pizzolato 2008), and viewed as the representation of the 'Other Italy': the symbol of Italian productivity, which attracted mass flows of internal migration, especially from the *Mezzogiorno* (the southern part of the Italian peninsula) to the industrial centres of the North (Sacchi and Viazzo 2003). Like many industrial cities of Western Europe, the common perception of Turin was that of a rather grey and dull industrial city, beaten by the rhythms of manufacturing production (Gabert 1964; Bagnasco 1986). From the 1970s onwards, the gradual crisis of Fordism – caused by the impact of the oil crisis on the local automotive market, and the increased global competition in the car sector – led

to dramatic changes in the socio-economic foundations of city life (Bagnasco 1990; Radicioni and Borlera 2009).

The aftermaths of industrialisation became visible through the intensification of social unrest and conflict, also confirmed by the cinematic landscape of the late 1970s, 1980s and 1990s; cinema, in fact, exposed the spaces and stories of the negative implications associated with the collapse of the ‘car empire’, particularly social distress and environmental deterioration (Vanolo 2010).¹⁷ In those years, the industrial crisis and the growing reduction in employment rates interwove with great episodes of political violence, historically known as the ‘Red Brigade’ terrorist attacks, and with workers’ mobilisations (the so-called ‘march of the 40,000’). These events laid the foundation for a debate about the city’s futurity, which envisaged an opening up of development directions different from that of Fiat (Pizzolato 2008; Pace 2011). Since the 1980s and 1990s, the post-industrial transformation of Turin has gradually developed, as a result of regional government strategies for development; these strived to turn the capital of Piedmont into a regional and national node of culture and technology, by boosting Turin’s leadership in alternative economic sectors such as ICTs, university education, tourism and cultural industries. These initiatives contributed to enhance the city’s visibility in the global scenario of economic competition, in line with the emergence of urban branding, a catalyst for policy-making and touristic promotion (De Rossi and Durbiano 2006; Santangelo and Vanolo 2010; Crivello 2011; Belligni and Ravazzi 2012; Semi 2015; Vanolo 2015).¹⁸

Italy’s electoral reforms of 1993 allowed for the consolidation of wider changes in the party system, and for the first time citizens could vote directly for the city mayor. In the face of massive corruption scandals (*Tangentopoli*) and the decline of traditional parties, which had ruled Italy for almost 50 years, Italian democracy entered a phase of far-reaching reform with regard to the most basic features of parties, and, especially, with respect to the mayor’s position in political government and strategic planning (Pinson 2002; Belligni and Ravazzi 2012). As a consequence, local authorities gained greater control and ownership of physical transformations, thus taking up a role they did not have

¹⁷ Examples include *Torino nera* (Lizzani 1972), *Torino Violenta* (Ausino 1977), *La ragazza di via mille lire* (Serra 1980), *Vite di ballatoio* (Segre 1984), *Portami Via* (Tavarelli 1994), *La seconda volta* (Calopresti 1994), *Tutti giù per terra* (Ferrario 1997) and *Preferisco il rumore del mare* (Calopresti 1999). Independent filmmakers such as Armando Ceste, Alberto Signetto and Alessandro Tannoia have also been of importance in providing historical accounts of the transition of the city’s geography, from the industrial to the post-industrial age. Remarkable examples include *OGR Zona Gialla* (Tannoia and Lionello 1996), *Città svelata, Fiumi urbani* (Tannoia e Lionello 1998), *Variazioni* (Ceste 2004) and *Civogarrone73* (Ceste 2004).

¹⁸ Belligni and Ravazzi (2012) identify three agendas of urban development, which exemplify the governance story of post-Fordist Turin. While ‘Polycentric Turin’ (*Torino Policentrica*) addresses the issues concerning economic conversion and infrastructural redevelopment, the attributes ‘Pyrotechnical’ and ‘Polytechnic’ (respectively *Torino Pirotecnica* and *Torino Politecnica*) relate to cultural entertainment and training/research as the principle assets and resources of urban and regional growth.

previously (Bagnasco and Le Galès 1997; Le Galès 2003; Pinson 2009). The decision to approve the 1995 Plan (P.R.G. Gregotti-Cagnardi) was pivotal in establishing the basis for the city's metamorphosis. The new Master Plan reinforced the rationale and geometry of the urban grid that marked the historic fabric of Turin, by establishing a new backbone in parallel to the Po River; this, in turn, led to the recycling and beautification of the archetypes of the city's industrial heritage, which became the "playgrounds" of the physical metamorphosis of the contemporary city (Bianchetti 2011). The 'Backbone' (*Spina*) delineated the main axis of urban redevelopment and major infrastructural works. Spina 2, Spina 3 and Spina 4 designate the areas of transformation that adjoin the main line.

From the 1990s onwards, municipal rehabilitation initiatives were put in place, which aimed to re-colour the greyness and demolish the ugliness of long-term decay through the enhancement of streets, housing and public spaces, both on the outskirts and in the inner-city areas of great historical and architectural interest. The Torino Internazionale was the political body responsible for proposing the Strategic Plans, which are all based on the Master Plan. The project behind the Strategic Plans successfully posited Turin as one of the first Italian cities to develop a strategic plan in order to support the process of change it was going through (Pinson 2002). The first edition, in fact, was approved in 2000, while the second and third editions were published in 2006. These initiatives of urban change-making have attempted to redefine the international image of the city, leading to the hosting of the Winter Olympic Games in 2006; this represented an attempt, on the part of local politicians and national government, to emulate other post-industrial cities in Europe, which had tried to turn around a city's fortunes by hosting urban mega-events (Horne and Manzenreiter 2006; Orueta and Fainsten 2008).

The neoliberal imperatives dictated by national and global, politico-economic elites have been incorporated into economic development strategies at urban and regional levels, particularly in the form of urban networking and city marketing initiatives, as well as through regeneration policies.¹⁹ These were oriented towards the tackling of situations in which the environmental and functional degradation of the city was also accompanied by social malaise, marginalisation and economic stagnation (for an overview see Governa and Salone 2004; Governa et al. 2009). Turin's 'Special Peripheries Project' represents the most paradigmatic example in this field. This programme assumed a distinctive character mostly because it contributed to making explicit

¹⁹ These include Integrated Intervention Programmes (*Programmi Integrati d'Intervento*, PII, 1992), Urban Rehabilitation Programmes (*Programmi di Recupero Urbano*, PRU, 1993), Urban Renewal Programmes (*Programmi di Riqualificazione Urbana*, PRIU, 1994), Urban Renewal and Sustainable Development of Territories Programmes (*Programmi di Riqualificazione Urbana e Sviluppo Sostenibile del Territorio*, PRUSST, 1998), and Neighbourhood Contracts I and II (*Contratti di Quartiere*, CdQ, 1998 and 2004). What is important to stress here is that all these development programmes should be intended as sectorial types of policies, which are neighbourhood-based and directed at housing infrastructures and public facilities, including green spaces within city boundaries.

the institutional dynamics of ‘multilevel governance’, and offered an integrated approach to territorial development (city, region and Europe). It thus pushed the public administration to work – together with bank foundations and third sector organisations – towards the development of welfare policies, particularly in the fields of elderly care, housing, migration and civic culture (Governata and Lancione 2010). The implementation of these projects was greatly aided by more than 15 years of political continuity, provided by Mayor Castellani and his centre-left successor, Mayor Chiamparino, both of whom won strong second mandates. By early 2006, Turin had gained the reputation of being a ‘minor global city’, showing that it had the organisational know-how necessary to change the image of a decaying industrial city into that of a city ‘on the move’: one capable of anchoring urban change movements coming from other European urban contexts into the city’s urban and social fabric (Brenner and Keil 2006; Sassen 2009). The transition to the post-industrial age has been accompanied by a vast editorial production on Turin, which has enriched scholarly perspectives on the city and also confirmed the role of university institutions in making Turin’s ruined past a privileged site of reflection.²⁰

This period was viewed and perceived as a golden era, in which to fast-track the urban regeneration agenda and bring the city’s position out into the global arena of territorial competitiveness. The contrast between before (‘ugly atmosphere’) and after (‘happy atmosphere’) emphasised the idea of a political momentum that circulated across the city, while at the same time revealing “the often-implicit politics of forgetting and amnesia” that manifested in reuse processes, as confirmed by the reinvention of the Lingotto (Colombino and Vanolo 2015, 1). In this regard, the words of a prominent political figure and former chairman of the Environment Committee in Turin²¹ – talking about the city during the post-Fordist transformation of the 1990s – clearly capture this chronological contrast of urban atmospheres: “In that period, Turin was a city, I would say, on its knees; a city basically turned inward, there was a very much...depressive atmosphere” (SI07). With the financial crisis of the late 2000s, the initial enthusiasm progressively decayed, and the ‘enlightenment function’ that policy makers had played started to wane, too.

This ‘ugly atmosphere’ highlighted the discrepancy between the physical evidences of a post-industrial society and the “people and places experiencing post-industrial situations” (Storm 2013, 9). Turin was one of the Italian cities hit hardest by the 2008 global economic crisis, given that it had already been suffering from the progressive stagnation of local industrial sectors (particularly

²⁰ Examples include the *Collana Blu* (1980-2011), a collection of edited volumes presenting a collage of histories, which thematically traces the manifold transformation of the city.

²¹ I don’t mention the name of my informants in order to protect their identity. Citations have been enriched with contextual information about the professional and political role of the interviewee, as a way to fully grasp the relevance of such actors for the field of study. In addition, citations specify how I got acquainted with research interlocutors, namely through sit-down (SI) or walking (WI) interviews and informal communications (IC) with passers-by and other informants.

the automotive sector, textile industries and the metal production sector), increased unemployment rates and massive public debt, partially as a consequence of the Winter Olympic Games. The severe urban crisis, together with the consolidation of fiscal rules and austerity policies imposed by the European Union, had a huge effect on the attempt to pursue urban renewal programmes and to promote welfare policies in the face of decreased industrial outputs and growing social inequality (Capello and Porcellana 2017; Porcellana 2018; Badino 2018). Indeed, Turin's transition to the post-industrial age has been fraught with contradictions and paradoxes that have become apparent especially in the last decade, when the city's kaleidoscope of social realities frequently contrasted with the representation of a city capable of changing its own destiny by endorsing a neoliberal rationality of urban growth (Belligni and Ravazzi 2012; Semi and Capello 2018).

Turin may, then, provide an opportunity to reflect on the difficulties of post-industrial cities not only to put a new future into being, within the framework of the global transformations of urban politics, but also to bear “the ghosts of industrial ruins” (Edensor 2005) that repeatedly “haunt” the city's present (Degen and Hetherington 2001). These processes of change have exposed what appears to be a growing divergence between ‘old’ imaginaries of urban change, on the one hand, and the ordinary situations of post-industrial subjectivities, on the other; in doing so, they foreground a city blocked by economic slump and political incapacity, unable to trace out new responses to the welfare crisis, especially the growing lack of job opportunities and affordable housing, and the securitisation of urban space. In fact, the geographer Alberto Vanolo writes that “there has been a shift from the celebration of Turin's beauty here and now to a growing emphasis on what Turin will be” (2016, 2). With the rise of the Five Star Movement, however, the future outlook remains fragile and uncertain. The prominent role of this populist party in local politics, following the national election polls of July 2016, has shed light on the emerging features of populism in Italian municipal governments, with one of the party's mayoral candidates being elected in Turin (Mayor Appendino), the other in Rome. Following Ugo Rossi (2018), I would argue that both the post-Fordist transformation of the 1990s and the political turmoil that originated from the economic crisis of the late 2000s have turned the city of Turin into an emblematic example of the current right-leaning, populist phenomenon that is the Five Star Movement, and also of the organisational and institutional dilemmas that the latter has generated at local/national level.

The problematic implementation of the third Strategic Plan (Torino Metropoli 2025), published in 2015 by the association Torino Strategica (the former Torino Internazionale), shortly before the political defeat of Appendino's predecessor, Mayor Fassino, clearly shows the difficulty of keeping a ‘road map’ and ‘time frame’ for the city's development. Today, there is an overrepresentation of Turin in public and political discourse as a city

“wandering aimlessly”, living in a condition of “silent decline”,²² or as “a place” – a former mayor points out – “in which the head of a household is not able to pay the fixed monthly rate of a mortgage plan” (SI11). The city’s public debt is skyrocketing, and some have even argued that a “cultural holocaust” is taking place. A new urban area can only emerge amongst the rubble.²³ Within this context, a rhetoric of *degrado* jeopardises the imagery of the ‘new Turin’, and foregrounds the ideological uses of social discontent in order to build consensus around security measures that place urban space at the centre of narratives of control. *Torino. Un profilo etnografico* (Capello and Semi 2018) is the latest scholarly attempt to interpret the city during the current socio-economic and political crisis. It depicts Turin as a liminal city situated in a confused present, trapped between the legacy of its industrial past and the uncertainty of its future: and, I would add, still at the heart of debates about what counts as industrial legacy and what does not. As it emerges from the previous pages, the city of Turin seems to represent a paradigmatic example of the post-Fordist transformation of urban political economies and geographies, and is also the expression of the crises and contradictions associated with urban neoliberalisation. Carlo Capello and Giovanni Semi (2018) argue that this idea has created the common assumption that the city is an urban ‘allegory’ of Italian urban politics and, more broadly, of the relationship between urbanisation, industrialisation and the notion of post-industrial society.

That said, my question is, then, how we can think about post-industrial urban natures in Turin within this interpretative framework; I will do this by first laying out a historical analysis of urban greening and ecological imaginaries, which emerge from the 1990s transition to the post-industrial age, and which depict Turin as a green city. The following sections of this chapter, in particular, are dedicated to the discussion of riverside Turin as a fragmented type of landscape; I consider riverside areas as the symbols of this incongruity. I will demonstrate that the transformation of urban natures is the result of non-linear time-spaces, where the past and present come together into a constellation of actors, imaginaries, cultural practices, plans and projects in continuous recombination. In doing so I adopt the method of montage (Pred 1995) to connect different types of ethnographic data and contexts: interviews and conversations, archival documents, activist reports, newspaper articles and also field notes. The concluding section takes us back to the present, where I lay out an interpretation of *degrado*, defined as a cumulative process and as a vast temporal field that stretches to the past, the present moment of experience and the future.

²² La Spina L., *Il declino silenzioso di Torino. Ora la città si sente tradita* (La Stampa, October 6 2017).

²³ Tonelli M., *Torino, Roma e la cultura* (artibrune.com July 11 2018).

THE RIVERBANKS OF TURIN

The river historians Stéphane Castonguay and Matthew Evenden define urban rivers “in a descriptive sense as rivers that flow through cities, and in an analytical sense as those rivers that have been folded into the processes of urbanization, whether flowing through urban centers or not” (2012, 3). Turin’s proximity to rivers is not random. The ancient group of *Taurini* (218 BC) occupied the upper valley of the Po River, near the confluence with the Dora Riparia, where access to water provided enormous resources, including a defence line. From the foundation of *Augusta Taurinorum* (how Roman Turin was called) to the establishment of the capital of the Duchy of Savoy (1564), walls were an essential feature of the city’s topography; they not only served important defensive functions, but also shaped the physical division between the city and the rivers, as well as other configurations of nature such as parks and gardens. Turin was wholly built during the late Middle Ages and early modern period. It did not have large spaces of open grounds within its walls, with the exception of a few enclosed private gardens reserved for horticultural planting and aesthetic-decorative functions (Maffioli and Ghisleni 1971). The walls, however, were low enough to make visible, in the distance, sweeps of rural lands, the Alpine wall and the hillside. Rivers flowed out of the walled city and strengthened this spatial arrangement by supporting the defence of the city edges. Despite being located on the margins, rivers (especially the Dora Riparia) always played a central role in urban economies, delivering food and energy supplies, as well as carving trade transportation routes. Additionally, they were important in terms of governance systems developed to structure watershed management, basin planning, agriculture and fishing. Their existence, therefore, might provide foundations for transnational readings and comparative analyses with other urban rivers (Castonguay and Evenden 2012; Gandy 2016).

Enlargement plans (1630–1673) did not really change this spatial system. Rivers did not interweave with the city’s urban fabric, and constituted a space somewhere out there: slightly further out of the city, where the patchwork landscape of agrarian lands and riparian woods formed a socio-ecological zone of transition between the city and the residences of the Royal Houses of Savoy, the network of castles and palaces widely known as the ‘Crown of Delights’ (Maffioli and Ghisleni 1971). The Savoy Kings progressively purchased lands and built residences of pleasure and entertainment along waterways (including Mirafiori, Regio Parco and Venaria Reale), which confirmed a perception of nature as a focus of both control and pleasure (Defabiani 2010). The Royal Gardens (Turin’s miniature Versailles), surrounded by seventeenth-century bastions, represented the only green area within the walled city, which remained mostly inaccessible to ordinary people.

A system of canals (*bealere*) expanded the networks of waterways, which helped regulate flood patterns and major flood episodes, while at the same time functioning as an energy resource for agricultural and proto-industrial activities (Bracco et al. 1988). Rivers not only affected the environmental foundation of urban life by creating urban-rural linkages; they also emphasised the local geographies of social difference, by marking the distance between the city's core and the hillside, where aristocrat and bourgeois families could enjoy extraordinary views of the city from their villas and farmsteads, surrounded by woods and grapevine yards (Cornaglia 2010). Rivers shaped the city both internally and externally. They created a fluid geography that materialised the local articulation of a "frontier landscape" (Cronon 1996), used as a symbolic and material means of power affirmation and political celebration. In the preservation of forests and lands devoted to agriculture, one may also detect – as Vittoria De Palma writes (2014, 185) – "the early form of a preservationist agenda", centred on protecting animals and livestock as well as maintaining particular types of vegetation components. As a result, the city's transformations from the mid-seventeenth to the early nineteenth century cast light on riverside areas as signifying places that gravitated towards Edenic and utilitarian cultures of nature, but which were not yet entirely acknowledged as an integrated part of urban spatial development.

It was only under the French Empire that the progressive demolition of garrisons (1811–1813) paved the way for landscape transformations, which systematically changed the physical appearance of the city. Major infrastructural works, such as the redesign and construction of bridges (especially the Victor Emmanuel I Bridge and the Mosca Bridge), physically and visually reconnected the city to the Po and Dora basins, while at the same time making explicit the role that the Po River, and its five tributaries, played in the historical construction of the city (Maffioli 1978). Tree-lined alleys, commonly known as the 'green rivers' of Turin, marked a radical change in the city's geography by creating a functional space for circulation which established, contemporaneously, a visual connection to the heritage of the Royal Houses of Savoy, and also replaced the old system of walls with a greener one, which circled around the city's boundaries, covering empty places. Trees redesigned the city of Turin, particularly plane and linden, poplar and elm trees that adorned and shaded the *grandes places* and public promenades; they thus became the palpable indicators of the city's environmental policy during the modern period. Planning and design activities were also devoted to park and garden enhancement plans.

The expansion into open space, however, was largely ignored in the decades following the fall of Napoleon (1814). There was a scant provision of open space. Moreover, some gardens were never converted into a project, while others underwent consistent re-organisation. In this regard, remarkable examples include the failed plan for an Anglo-Chinese Garden, and the demolition of the Ripari Garden (1826–1834). Although the French period has

been closely identified with a moment of cultural turmoil, it also contributed to make explicit a certain reluctance of local governance, namely to actively engage with the international exchange of ideas in the fields of landscape architecture and design. In this regard, Migliorini (1989) points out how the demolition of walls in eighteenth-century Italy did not prepare the ground for new types of nature, as occurred in other Western cities across the Atlantic (i.e. the green belt in London, the park system in New York and the Ring of Wien); here the variation of the city's physical features progressively paved the way for an integrated vision of open space planning and design. The motivation and intentions for greening were strictly connected to an overwhelming emphasis on the notion of 'aesthetic decorum': the driving value and function that guides the integration of natures into the 'chessboard' structure of the built-up environment (Migliorini 1989). This situation is reflected in other examples in the Italian context, in which urban greenery, as a result of horticultural planting, played a subsidiary role in urban spatial developments.

The experience of Turin, nonetheless, boasted an exceptional example of Italy's politics of urban greening, when Valentine Park, together with the Murazzi waterfront area, provided the city with a large open space; the latter performed a central role in the context of the irreversible transformation of the city landscape and of society, from the mid-nineteenth to the early twentieth century. These riverbank spaces emerged as a response to the rapid industrialisation of the city in the mid-nineteenth century, even before the automotive industry was established in 1899. They were the work sites of generations of millers, laundrywomen and fishermen, who used water power as an energy resource for their livelihood activities. Additionally, they represented a recreational and festive place for its inhabitants, who occasionally bathed alongside the Po River. Surviving historical sources suggest that the construction of the Murazzi waterfront area, through the creation of a public promenade running parallel to the river, involved the dismantlement of the Moschino Village, home to one of the most marginalised populations of the city (Ternavasio 2014). These tracts of riverbank space, notably the ones adjoining the Po River in vicinity of the historic core of the city, became an integral part of future modernisation projects and the protagonists of the *mise-en-scène* of the city. Built along the left bank of the Po River, the aesthetic and political significance of these tracts of riverbank spaces was explicitly linked to the idealised image of nature as a means of fostering sanitary reform, technological modernisation and national values (Douglas 2013; Brantz and Dämpelmann 2011; Dameri 2010).

A picture progressively emerges from this situation, which reveals how rivers were, in a way, separated from one another not only aesthetically, but also in the cultures of their use. The Stura and Sangone circumscribed remote natural spaces that only began to intersect with urban spatial developments around the mid-twentieth century, whereas the area surrounding the Dora basin marked the oldest industrial district of Turin, where one of the first working-class

suburbs (called *borgate operaie*) arose just outside the city's custom barriers (Lupo 2008). The creation of Valentino Park, in particular, epitomised the story of urban-riverine relationships in Turin (Poletto 2008); it was built on the nexus between leisure and industry, during the formation of the modern city. Valentino Park reflects projects of nationhood after and before the Unification of Italy. Its inauguration in 1858, in fact, prepared the ground for the celebration – in 1861 – of Turin as the first capital of the United Kingdom of Italy. The park was constructed according to the French and British ideas of naturalistic design, and thus responded to a “generational model” (Cranz and Boland 2004) of open space; as such it was associated with a royal palace made available to the public as a “pleasure ground for active and passive recreation, where pleasure indicated an active social goal positioned in between amusement, didactic and social control” (Douglas 2013, 253).²⁴ Various international exhibitions were organised in the park. Particularly those held in 1884, 1911 and 1961 not only supplied a series of symbols of Italy's cultural power, but also showcased the know-how necessary to run a vast enterprise like that of a car empire, which was especially important given that the capital of the newly-founded Kingdom was moved to Florence, and subsequently to Rome.²⁵

In particular, the 1911 International Exhibition was held both in Turin and Rome, by way of commemorating the 50th anniversary of the United Kingdom of Italy. While Rome celebrated the country's jubilee by exalting colonial imperialism in the shadow of the ruins of the Roman Empire, Turin, instead, became the ancestral birthplace of Italian capitalism, to use Grandin's words (2009). These riverbank spaces became the places where to celebrate refined architectural features and landscape design gestures, as well as a repository of imaginaries of technological advancement, where many different cultural projects of nature interacted: from architecture and botanical innovations to the topography of water.²⁶ Nevertheless, the re-configuration of particular tracts of

²⁴ The area was originally the site of a military residence; in fact, military ceremonies alongside the Po River would celebrate the royal potency and victories. In 1815, for example, the re-enactment of a naval battle was organised to commemorate the splendour of the *Ancient Régime* (Defabiani 2010). During my visits to the Historical Archive of Turin, I spoke with the historian and sociologist Fulvio Peirone, who gave another example of this specific use of the site; he explained that the area was used as the scenery of crude satire sketches on Savoy politics during the eighteenth century.

²⁵ Park planning was by no means a straightforward process. The design solutions of Jean-Baptiste Kettman (1855) and Barillet-Deschamps (1860) raised criticism from local politicians, who argued that the cost was too high. City authorities then proposed an alternative plan (1870), whose implementation showed the central role played by the municipal gardeners Ernesto Balbo Bertone di Sambuy and Marcellino Roda; these became prominent figures in the local system of green space planning. Opposition to the park grew steeply when the city lost its status as a capital, and Turin had to face new politico-economic demands.

²⁶ Examples include the Botanical Gardens, which contained green houses as well as an arboretum, and the Medieval Castle, a faithful replica of a fifteenth-century village built for the 1884 International Exhibition. The channelisation of these tracts of riverbank spaces completely changed the physical appearance, hydrology and ecology of the river for leisure purposes, favouring the birth of rowing clubs and boat races.

riverbank spaces into event venues exemplified the consolidation of riverside Turin as a space of incongruity, where the contrast between spectacle and absence provided the ground for experimentation with design gestures. These, however, were never converted into permanent landscape features. Temporary bridges, along with decorative lights, offered new ways of “eyeing nature” (Cosgrove 2003), while at the same time creating a contrast between the architectures of spectacle and the vernacular riverside landscapes. In public memory, the latter generally evoked images portraying rows of clotheslines that laundrywomen used to skilfully craft along the west bank of the Po River (Peirone 2017). The hygienist and engineer Luigi Pagliani was among the most influential promoters of the next stages of open space planning; thus he underlined the importance of parks as countermeasures to environmental and health risks, while at the same time raising criticism against the scant distribution of green amenities in the city (Bagliani 2010). The 1908 Master Plan directly addressed the necessity of providing six park areas, drawing particular attention to green areas that adjoined rivers. Within this context, Pellerina Park represented an emblematic example of the use of green areas as ‘tools’ for integrating riparian ecologies into the city, thus showing the interaction between natural environments and the increasing complexity of the real estate market. Park planning projects thus highlighted how the issue of financial constraints and intense land-use conflicts were skillfully manipulated in order to impose particular technical visions of nature, dominated by economic rationality.

With a few exceptions (Pellerina Park, Ruffini Park and Michelotti Park), it was only after World War II that the public works were completed, and municipal bonds were put in place to limit the occupation of floodplains. However, urban growers and harvesters, by cultivating plants in the city, promoted a diversified set of green spaces within the built environment that – while residual in the beginning – represented the affirmation of a cultural practice of nature, and which increasingly changed the landscape of Turin. From 1917 onwards, city authorities entrusted citizens with the cultivation of vegetables on waste spaces (*terreni incolti*) owned by the municipality. Gardens were mostly located on wastelands created by the dismantlement of the 1911 Exhibition, but they also arose on bombed sites across the city. Wartime gardens (*Orti di Guerra*), along with municipal farmsteads, were not just a fundamental source of food, but also a powerful tool of fascist propaganda, which appropriated the theme of city agriculture in order to promote the rural politics of the regime. Allotments also spread across city parks, such as Valentine Park, in order to sustain the production of potatoes, kale, onion, soya and fruits. The rent of plots of land to cultivate vegetables continued to grow during and after World War II. The city’s modernisation during the Fordist age, founded on a model of synoptic rationality of urban planning and economic organisation, decisively reshaped watercourses and their adjoining spaces. The river was not only used as a source of energy, but also as a place to dump waste products. Watercourses thus became part of an organic machinery, which served the urbanisation

process and the spatial distribution of the automotive plant. Sand extraction sites were also built along the Stura riverbanks, for the construction of residential building during the housing boom of the 1950s and 1960s. This led to the emergence of large subsidised housing estates used for the development of the Fordist city and its workers, many of whom came from the Italian *Mezzogiorno* (Adorni et al. 2017; Garda et al. 2015; Di Biagi 2008).

The industrial development of Turin also reorganised everyday leisure spaces. The proliferation of spontaneous allotment gardens and other recreational activities, such as fishing and bathing, became the socio-cultural expression of the Fordist city, built on the spaces of leisure and subsistence. However, it is the cultural memory of the people washing their cars beside the Po River that seems to vividly condense the many meanings of urban-riverine relationships during the city's rapid industrialisation. Indeed, while peripheral riverbank spaces were turned into a "sacrifice zone" (Storm 2013, 4), deliberately damaged for industrial purposes and economic profit, the tracts of riverbank spaces located in proximity of the historic centre embodied less tangible proof that progress and ruination are tied to one another. During the 1961 Exhibition, a journey across Valentine Park (south of the city gates) would have been part of a visit to "Italia 1961": the area where the architects Luigi and Antonio Nervi planned the "Palace of Labour" (*Palazzo del Lavoro*), designed to be one of the main settings of the exhibits. Nowadays, people – driving cars or riding bicycles on their way to some other destination – catch a quick glimpse of the ruined building, almost out of the corner of their eye; the rusted and blackened facades have, in fact, stirred up public attention and complaints.

At the time of the exhibition, by contrast, columns made of marble, cement, steel and glass sought to showcase the achievements of science and technology over the past century. Outside the building, two major attractions would catch the attention of visitors: the brightly coloured cable car that transported visitors from the exhibition site to the newly developed "Cavoretto Europa Park", a scenic point in the hills above Turin; and the 1.2 km long Alweig monorail, which connected different exhibit points. Before the 2006 Olympic Games, a proposal to rebuild the monorail shows that spectacular gestures of the past – despite their having no lasting effect – can become a means of reimagining the urban environment, and a source of ideas to re-enact in the present. Both the cable car and the monorail embodied a "techno-fetishist vision of the urban space" (Gandy 2004, 39), permeated with conceptions of utopian architecture and a faith in technology long before the oil crisis of the 1970s announced the toxic effects of what some call the Anthropocene. The cable car and the monorail offered dwellers panoramic views of the Po River, placing the heritage of the city's most prominent ecologies in the context of a Fordist city that already contained, within itself, the seeds of its future undoing. In recent times, local media have recalled the construction-destruction of these attractions in nostalgic terms. Newspaper reports have followed the ghostly traces of the monorail's pylons, abandoned on a vacant lot on the southern outskirts of the

city. Others, instead, recall how in the days following the 1990s flood, another pylon “emerged from the riverbed as an afterworld body”, near the confluence between the Po and Stura rivers.²⁷ These images metaphorically express the uncertain and erratic role of the riverine landscape in the formation of the post-industrial urban imaginary.

POST-INDUSTRIAL RIVERSIDE IN BETWEEN HERITAGE AND SCARS

From the late 1970s onwards, the looming threat of environmental crises eventually became visible in the proliferation of urban industrial wastelands and ruins, some of them in the riverside areas of the periphery.²⁸ Here, riverine habitats were adversely affected by lowering groundwater and water pollution, with the Dora and Stura being depicted as “cyanide rivers” (Peirone 2017). The case of Teksid, a subsidiary company of FIAT, underscored a national concern regarding the illegal disposal of asbestos into the Po (Ecopolis 2018). The vulnerability of riverbank spaces also became visible through the increasing frequency and intensity of flood events. A remarkable example includes the flood of October 2000, which led to the closure of 16 bridges in the city and provoked the collapse of the tract of the Turin-Milan motorway, which offered apocalyptic scenes of mud and storms. These negative events must be examined in the context of demographic, economic and socio-political changes that shaped urban riverine relationships, but also in terms of the changes in legislation and public discourse. Turin’s population reached its peak in 1975 (around 1.2 million inhabitants). Since then, the number of inhabitants in Turin has decreased. The first ‘pedestrian Sundays’ (i.e. car-free mobility days) of the late 1970s expressed the idea that ‘the party was over’.

The rise of Turin environmentalism has its roots in this period of growing grassroots struggles, in the form of neighbourhood-based organisations (*Comitati di Quartiere*) as well as other activist groups, which include different types of animal rights organisations and landscape preservation groups (Legambiente, Italia Nostra, Lipu, Associazione Il Tuo Parco), who had been following the surge of Italian environmental movements in the mid-1960s

²⁷ <http://www.italia61.it>

²⁸ The territory of the Municipality of Turin included ten million squares of derelict industrial sites, of which 8 per cent belonged to the Municipality. From 1995 to 2015, five million squares had been cleaned up, reused and redefined mainly for hosting commercial activities and housing construction (Rapporto Rota 2016).

(Ecopolis 2018). Hence, the process of building a response to different forms of socio-environmental degradation was complex and demanding. In the “producing city” of Turin (Mumford 1938), the imperatives of manufacturing growth as well as opportunistic approaches to land use planning made environmental risks and social problems completely predictable and unavoidable.

Where there should have been schools, kindergartens, playgrounds, parks, market areas, social centres, gigantic concrete mushrooms have been growing instead, ten floors high, without any services. This became the new suburb of industrial Turin. In order to equip the city with basic civic services, in the 1970s the city needed 33 million square meters of area that no longer existed. Only by using pickaxe and dynamite, and by destroying a good part of what had been illicitly built, it would have been possible to find these surfaces (Diego Novelli in Radicioni 2009, 11).²⁹

Mayor Novelli (1975–1985) programmed an ambitious agenda of urban change, and launched a series of initiatives to revise the Master Plan, including a ‘Green Plan’ for the enhancement and conservation of metropolitan natures. Various editorial publications incisively addressed the ambivalent role rivers played in the historical construction of the city, and conducted urban and regional research on the history of riparian ecologies (Maffioli 1978abc). In 1975, the construction of a water drainage system alongside the Po River, near Settimo Torinese, certainly represented a turning point in the system of water resource management and, more broadly speaking, local environmental policy. Later, the studies coalescing in the ‘Po Project’ not only helped create new legislation that would enhance the planning and normative context for the preservation and restoration of the Po basin, but they also contributed to lay down the foundations of 1990s environmental rehabilitation initiatives. However, the presence of strong economic interests within the municipal council quashed all these initiatives, and any vague impulses to restructure the urban land use agenda were abandoned (Pinson 2002).

From the early 1990s onwards, in particular, the growing importance of the social, ecological and economic benefits of the blue-green infrastructure in academic debates was a factor that decisively affected municipal policy action. Furthermore, the institution of the Po River Park Authority (now called *Ente di Gestione delle Aree Protette del Po Torinese*) in 1990 was pivotal for the promotion of biodiversity conservation plans of the Po basin. The foundation of key agencies was followed by other initiatives. A remarkable example is the film *Città svelata, Fiumi urbani* (1997). It describes the result of a series of boat excursions by a team of the Municipality of Turin, who travelled across the Dora Riparia until its confluence with the Po, in order to provide documentary evidences, from the river to the city, of the traces of the city’s industrialisation, such as factories, channels and dams.³⁰ From the early 2000s to 2006, the

²⁹ My translation.

³⁰ The images and videos recorded during the river crossing were presented in the context of the public event *Fiumi Urbani – Dora Virtuale*, which took place on 13 September 1997 at the

research activities of the Observatory of Sustainable Cities, based at the Polytechnic School of Turin, helped create practical understanding of how to translate the functionality of ecological networks into planning and design principles. Measures aimed, for example, to improve hydrogeological conditions of riverine habitats, and to promote restoration efforts that reflected a shift in the conceptualisation of nature from ‘spot’ to ‘corridor’. The transition to the post-industrial age has certainly found, in metropolitan natures, a framework for the transformation of the city’s public infrastructure, which has functioned as both mediator and medium in processes of socio-economic restructuring and metropolitan change.

The first and second editions of the Strategic Plan defined sustainable development and ecological restoration as the guides and foundation strategies for the enhancement of the quality of urban environments, in order to develop governance, planning and conservation practices across different scales. For instance, the local implementation of the principles of Agenda 21 mobilised sustainable development as a catalyst for social change and policy mechanism, by addressing a variety of goals and targets: public transport improvement, solid waste management, green building, food security, the cleaning up of brownfield sites and the redesigning of public open spaces at the urban/regional level (Torino Internazionale 2000, 2006). In 2006, the publication of the Urban Green Space Regulatory Plan (*Regolamento del Verde Pubblico e Privato*) represented the first effort to structure, protect and communicate the variety of urban green spaces, in the context of the physical transformation of the city. The regulatory plan was the result of a citizens’ initiative referendum promoted by a coalition of environmental organisations, including ProNatura, Italia Nostra and WWF. It represented a preparatory plan for the elaboration of the Urban Green Master Plan of the City of Turin, which, however, hasn’t yet been completed. In addition, Italy’s adherence to the biodiversity directives of Natura 2000, the largest coordinated network of protected areas across the world, has contributed to integrate EU conservation laws into the regional legislation context (EU 1992). Simultaneously, the establishment of two territorial programmes – ‘Turin City of Waters’ and ‘Green Crown’ – paved the way for a long-term plan for the creation of ‘greenways’ in order to improve integrity in natural resources. While the programmes reinforced the need to conserve and revitalise local natural heritages by restoring and enhancing the pre-existing network of open green spaces, they concurrently proposed ambitious interventions of environmental restoration and massive clean-ups of brownfield sites and abandoned spaces.

Remarkable examples include the Meisino Nature Reserve (2000–2005), a river park situated near the confluence of the Po and Stura di Lanzo, which was redesigned by the German landscape architect Andreas Kipar in collaboration

demolition site of the Fiat Ferriere, nowadays part of Dora Park (<https://www.youtube.com/watch?v=x0-oJ7mdBIY>).

with the Municipality's green space department. Here, Isolone di Bertolla, an island delimited by the Po River on the south side and by a canal (property of the city's energy company) on the north side, is of particular interest due to the presence of grey herons' nests on poplar groves—a unique example of urban heronry in Italy. In addition, Dora Park represents one of the most successful interventions in the field of environmental rehabilitation and urban renewal, while simultaneously becoming, at the local and national level, a flagship project of the spatial conversion of a brownfield site and of the re-naturalisation of the river (Dora Riparia).³¹ In 2004, an international contest for the park's conversion was launched. The winning project was that of the working group managed by Peter Latz, creator of the Landschaftspark in the German Ruhr basin. The first parcels of the park were inaugurated in 2011, whereas the last section, called Valdocco area, is currently still under development.

Another significant example is Sangone Park. It was inaugurated in 2007 and is located along the Sangone River, within one of the oldest industrial, working-class, southern sub-districts of Turin: Mirafiori area, a former centre of FIAT's automotive production. The restoration of riverbanks, which remain mostly inaccessible, required the dismantlement of hundreds informal allotment gardens, which have subsequently been converted into municipal allotment gardens.³² The Sangone area is also important for the local implementation of River Contracts, a tool for coordinating public intervention in the water management of river basins. The Piedmont Region is the second Italian region that, from 2007 onwards, started using River Contracts in order to implement the Water Protection Plan (*Piano di Tutela delle Acque*). Returning to the northern periphery of Turin, here the Municipality announced, in 2012, the environmental rehabilitation of 42 hectares of wasteland located within the Falchera area; this is one of the oldest social housing estates in the north-eastern periphery of Turin, designed by Giovanni Astengo and other architects in the 1950s, in the context of the INA-Casa plan (1949–1963). The creation of this open space included the allocation of allotment gardens and the cleaning up of a lake; the latter, as recent studies suggest, has become an important biodiversity spot where herons, common snipes and coots flock. The Meisino, Dora, Sangone and Falchera Parks provide four examples of post-industrial landscapes, which reflect different ways of substituting, healing or forgetting “the scars of the industrial past” (Storm 2013) by transforming existing habitats and establishing new green spaces after habitat destruction, through horticultural interventions and new forms of wilderness.

³¹ Dora Park is located within a former industrial site of more than 1 million square metres, where big factories such as Fiat Ferriere (iron metallurgy), Michelin (tyres), Savigliano (electrical products and manufacturing of components for railways), Paracchi (carpets) and Superga (shoes) were located, and took advantage of the proximity to the river and the railway.

³² From 2018, the area is the target of a ‘post-industrial urban regeneration’ programme (ProGiReg), funded by the European Commission under the Horizon 2020 programme, which uses nature-based solutions for the rehabilitation of numerous empty spaces and buildings in the areas that adjoin the park.

All the initiatives mentioned so far have contributed to change perceptions of the relations between the city and its green landscapes, while also shedding light on the processes through which local authorities attempted to internationalise the natural heritage of the city/region and, at the same time, forged the city's image in relation to its local residents (Vanolo 2015). The city has posited itself as one of the greenest of Italy's major urban centres, with a green view index of 16.2 per cent (Treepedia 2017).³³ Beyond this, Turin's representation as a green city in political and public discourses also has its roots in the conservationist evaluation of historical ecosystems. The 'Green Crown' Strategic Plan, in particular, has been pivotal for developing an integrated vision for the enhancement of green spaces along waterways, in connection with the heritage of the residences of the Royal House of Savoy (Cassatella 2016). This vision is confirmed in the third edition of the Strategic Plan, where emphasis is placed on the value and function of 'Green Infrastructure' as a design and policy principle; the latter works to reinforce governance networks and enhance the accessibility and quality of metropolitan natures, while at the same time acknowledging advances in the field of EU urban green space policies (Torino Strategica 2015).³⁴ Furthermore, the residences of the Royal House of Savoy – which include protected areas, the Po River and its tributaries – have been part of the UNESCO World Heritage List ever since 1997, whereas the EuroMAB (Man and Biosphere) network recognised the Turin hillside as a Biosphere Reserve, in 2016. These undoubtedly represent important achievements of the local governance in building policy networks.

WILL THE FUTURE OF TURIN BE GREENER?

Looking at the city from the Superga hillside, Le Corbusier once said that "Turin is the city with the most beautiful natural location in the world" (cited in Griglié 1968). Indeed, his words are often regarded as worthy of mention in descriptions of the natural landscape of the Turin plain: the area that stretches alongside the Po River, with its main tributaries, and the hillside, whose physical and geological characteristics have led to the formation of numerous gravelly shores, oxbows and riparian woods. In the world of Le Corbusier, Turin thus seemed to "take back man to nature", and reconcile nature and the

³³ Treepedia is a project of The Senseable City Lab, an initiative of the Massachusetts Institute of Technology, which is coordinated and directed by Carlo Ratti, an important architect and engineer from Turin. Treepedia promotes the importance of green canopy by analysing the amounts of green that passers-by perceive while walking down the street, which is measured through a 'green view index' (<http://senseable.mit.edu/treepedia>).

³⁴ The Natura 2000 backbone constitutes the backbone of the EU's green infrastructure.

machine just like his urban utopias of the 1920s did (Dummet 2007; Brantz and Dümpelmann 2011). This image dominates in the field of heritage and conservation, and is confirmed in a statement of the local historian Paolo Cornaglia: “The blue-green networks connecting the Royal House of Savoy, consisting of castles and villas joined by gardens and hunting woods”, he observes, “can be regarded as the DNA of the blue-green infrastructure of the city”³⁵. Following the conceptual framework of the urban ecologist Ingo Kowarik (2005), I argue that this view of nature confirms a “retrospective perspective” on nature that is regarded as ‘original’, with the risk, I would add, of transcending the historical and natural processes that have led to the formation of post-industrial ecosystems.

Despite the narrative of a green and smart Turin, which has been acknowledged as a brand value, the place of nature in the contemporary city is still a shady and difficult to grasp, socio-ecological reality: polarised between positive heritage and burden, across various realms of political discourse, municipal management and, more broadly, public culture. Belligni and Ravazzi (2012) also struggle to fully support the view of a green Turin given the critical position that it occupies in terms of the low air quality and the high land occupation rate. Official reports claim that air is most polluted in Turin (Legambiente 2018), which is confirmed in activist reports (Ecopolis 2018). From a different angle of research, Silvia Crivello (2015) has written a critical report about the management of solid waste, where she also demonstrates that the mobilisation of smart technologies often negates deeper reflections on socio-ecological inequalities, as in the case of Turin’s waste incinerator and its impact on the inhabitants of Gerbido and Mirafiori Sud. The apparent simplicity of the ethnographic space – where to walk and talk with the users of green spaces – has proved to be essential for the listening and recording of these contradictions, gaps and hidden historiographies. It is, in fact, by making use of unstructured conversations with countless informants that I gradually became aware of the incongruity and fragmentation of Turin’s urban natures, which is the hypothesis of my dissertation. For instance, in the last days of June 2017, I walked for roughly two hours before stopping to sit on a bench along the river. Alberto (80 years old, informal conversation) was also sitting on that bench. He smiled to me and said that he very much loved to sit by the river. “Nowadays the only problem”, he repeated several times, “is the disrespectful civic behaviour that some display towards the environments we live in”. While pointing his fingers to the ground, he ended up saying the following: “Looking down from above the city looks like a wonderful garden. Looked at from below, Turin is a garden full of shit”.

Recent public reports have highlighted that the city has reached 24 square metres of green space per inhabitant in 2016; the amount of vegetation areas

³⁵ Paolo Cornaglia, “History of Turin’s park system” (Seminary *Urban Landscapes and Urban Parks: Turin as case study from interdisciplinary perspectives*, DIST, Polytechnic of Turin, 5th June 2017).

has thus increased by 525 per cent since the 1970s (La Città e i suoi numeri 2016). Torino Atlas (2018) is the last attempt to map the variety of the urban green infrastructure of the metropolitan area (Fig. 2.2 and Fig. 2.3). In the world of municipal authorities, where I have been conducting interviews, the numerical assessment of the spatial distribution of green spaces thus validates the policy's capability to promote greening solutions as well as to address environmental justice and climate change concerns. Numbers, in fact, create a field of attention that drives state and municipal, environmental rehabilitation programmes, as well as urban competition strategies in the global urban arena. The city's commitment to compete for the 2021 European Green Capital Award, for example, confirms this trend. At the same time, however, numbers also produce a knowledge that is often distant from accounts that emerge from qualitative research on situated experiences and historical specificities, as confirmed by the image that Alberto so spontaneously evoked.

Eighty-year-old Giovanni is a long-time activist, a former member of the Municipality and the coordinator of environmental association networks in Turin. Various grassroots activists describe him as the backbone of Turin's environmentalism. During my fieldwork research, it has been enormously helpful to discuss matters with him, and to gather the kind of qualitative data that would be difficult to unearth from other sources. "Numbers can, of course, be significant. However, there is a distinction to be made here between rates and the correspondent qualitative meaning", Giovanni suggests while sitting in the back room of his office. "Today", he adds, "one part of the areas that have been reconfigured into urban parks, and are thus considered the new green spaces, were already informal park areas, novel green spaces on vacant lots and industrial sites, although non-authorized or improper uses have often been made. This is the case, for instance, of scrap yards, sport clubs and waste dumps located in the riverbanks". Giovanni's words called attention to the ambiguities, related to the meaning of *naturalness* and *wilderness*, in his attempt to define what counts as open public space and what does not in terms of spatial units. He also implicitly suggested that distinctive meanings emerge from the controversial relationships between planned open spaces, such as urban parks and gardens, and those spontaneous areas of vegetation that planning projects mark in white, as supposedly empty spaces waiting for development. Finally, his words also brought to the surface the frictions and gaps that development policies may have generated, allowing incongruities to become perceptible.

The reshaping of urban rivers after decades of spontaneous use, neglect, abuse and removal of the riverine system has undoubtedly shed light on the formation of a new discourse of nature, one that has moved open public spaces, and especially riverbank spaces, to centre stage. Nevertheless, the project of riverine change and uplift coincided with the difficulty of materialising a systematic and homogeneous programme of landscape restoration. What has emerged in Turin, instead, is a programme of scattered and intermittent interventions, which have interacted in a disconnected manner with the other riverbank areas,

exacerbating the physical, ecological and social fragmentation of riverside spaces. The picture that emerges is one in which, although the effects of deindustrialisation have reached their highest point in the 1980s, the dismantlement of industrial brownfields, which started 40 years ago, still continues, whereas the rehabilitation of the riverbanks, among other things, has not yet been concluded. The positive reception Turin City of Waters, in particular, received, was the result of an advantageous political season in which the programme benefited from conspicuous financial resources to implement different urban projects: a condition that certainly had a positive impact on the political climate as part of the overall pre-Olympics euphoria. It was a feeling that nonetheless remained transitional. Although the official view is that the programme has today accomplished 83 per cent of the targets, Turin City of Water has remained a political slogan, whose articulation into political debates and planning practices seems to be merely evocative. Furthermore, the fragmentation of the overarching strategic plan into micro-patches of interventions and protection systems has produced a metropolitan scenario of inter-municipal conflicts at urban and regional scales of political regulation, which have struggled to overcome a merely politico-administrative idea of green infrastructure. It also suggests that a profound action of cultural change is necessary for technical experts, political decision-makers and citizens, in order to reorient consolidated scientific and cultural practices of nature, which contribute to processes of degradation in many ways. As a chief officer of the service of management of ecological resources pointed out,

Now that natural spaces, including riverbanks, have regained a role in the social life of the city, there is also the awareness that there is more a logic of condominium and less a common vision of nature at the centre of the regulation of metropolitan natures. In my view, it is for this reason that strategic plans such as the Green Crown or Turin City of Waters have no clear beginning or end! (SI04)

His words invite us to carefully rethink the meaning of the city's greening trajectory as a linear progression, and as a project bound to human action. The title of this concluding section is therefore a provocation. In this sense, the ethnographic encounter with geographies of urban natures, as an interpretative framework of the changing urban complexity, offers a route to understand that the phenomena of *degrado* and, more broadly, environmental change are not just found on the ground; rather, they reflect a vast temporal field that stretches out to the past, to the present moment of experience and to the future.



FIGURE 2.1 – The city of Turin and the two case studies (Source: Barchetta 2019)

9.1 Il contesto ambientale metropolitano

2011-2012 | FONTE: CARTA TECNICA REGIONALE, GEOPORTALE REGIONE PIEMONTE, CITTÀ DI TORINO

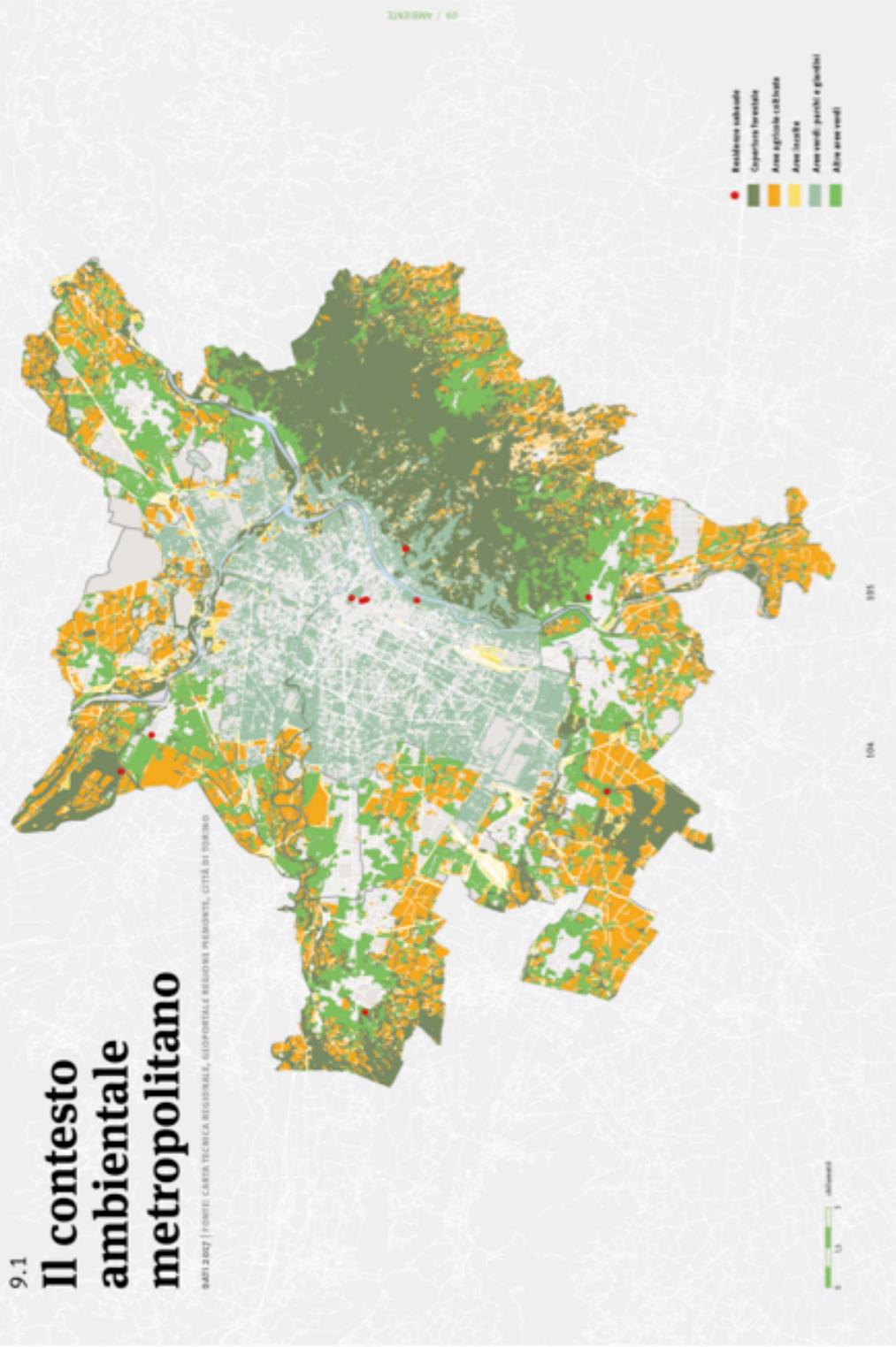


FIGURE 2.2 – The network of metropolitan natures (Source: Torino Atlas 2018)

9.2 Il verde urbano

MAPPI 2007 | FONTE: CITTÀ DI TORINO, DIREZIONE DISTRICTI MUNICIPALI, PIANIFICAZIONE E VERDE

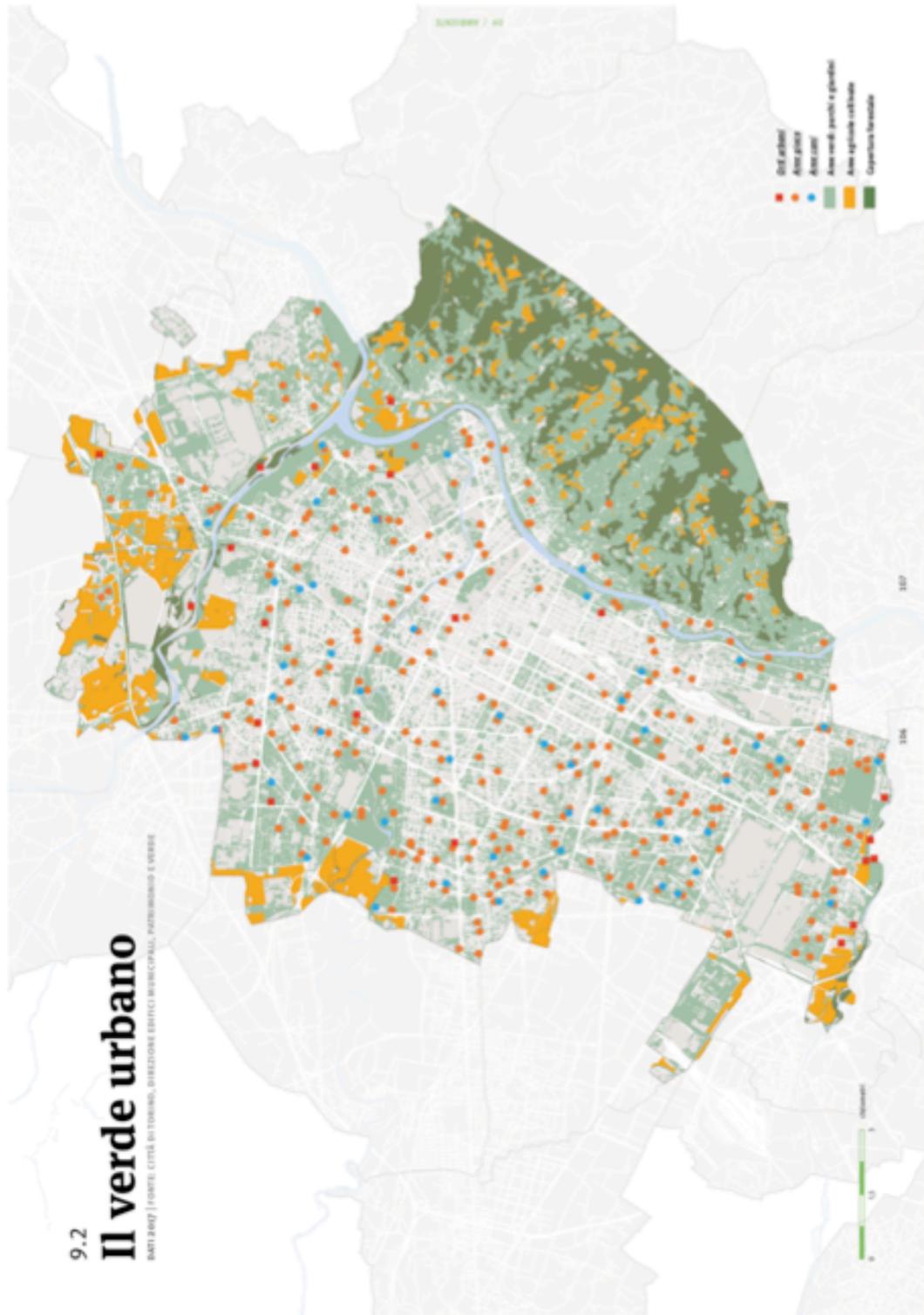


FIGURE 2.3 – The variety of urban open spaces (Source: Torino Atlas 2018)

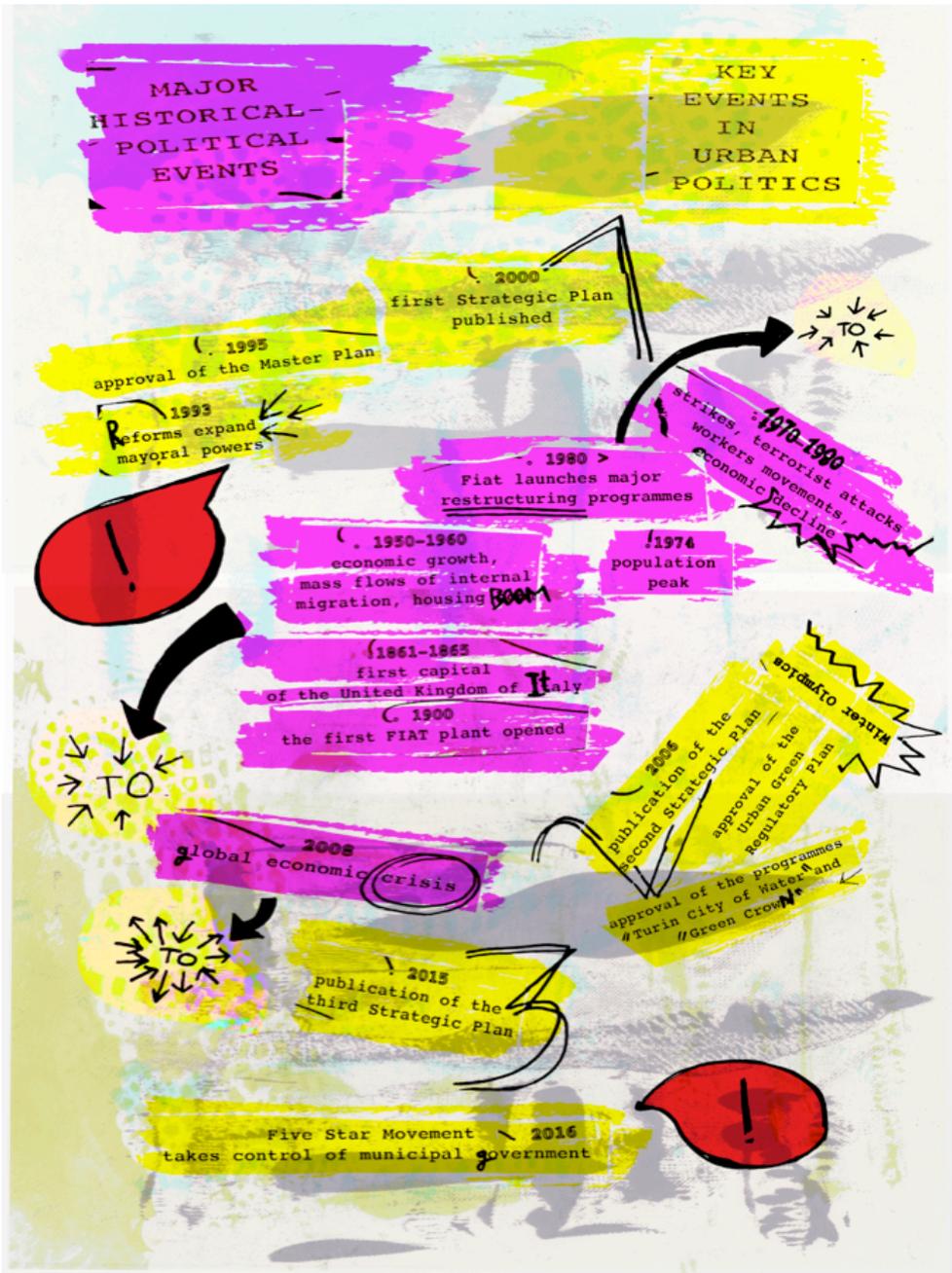


FIGURE 2.4 – Key events in Turin (Source: Barchetta 2019)

CHAPTER 3

THE MULTIPLE FATES OF MICHELOTTI PARK

FRAGMENTS OF PARADISE AND PATCHES OF DECAY

Set in the Borgo Po district, Michelotti Park is located on the southern banks of the Po River, in proximity to the historic centre of the city. Famous for its urban zoo, which existed from 1957 to 1987, this park has been characterised by the provision of habitat for a wide range of animals, which offers an example of the complex and paradoxical reconfiguration of natural spaces in light of shifting notions of public welfare and leisure (Atkins 2016). Archival material clearly highlights the idea of the municipal zoo as a flagship project for the area and, more broadly, for the whole city (Maschietti et al. 1990). The eventual closure of the urban zoo, in 1987, set the pace for a variety of planning initiatives and temporary uses, which overlapped with the zoo's archaeology; some of these plans came to fruition while others did not—most notably, a failed attempt was made to build a theatre in the former aquarium and reptile house.³⁶ In the 1990s, local authorities took a first step towards the renovation of the park. *Giò Park*, as it was now called, led to one portion of the former zoological garden being converted into a playground. Subsequently a bicycle path was built along the Po River. These renovation initiatives added new value to the amenity space, while also consolidating local attempts to create a new image of the city through a waterfront enhancement plan. The rehabilitation initiative was, in fact, part of Turin City of Waters' programmed interventions. Unfortunately, though, these initiatives crystallised the spatial segmentation of the area and accentuated the physical fragmentation both inside and outside the former zoo.

Progressively, a confused landscape took shape. Public and private actors of various kinds, from loosely organised associations to formal organisations and companies, have at different times managed the area. The former zoo hosted a myriad of music and art shows, and a number of exhibitions. From 2000 to 2005, for example, the area became the site of the scientific exhibition 'Experimenta', promoted by the Piedmont Region. In 2012, the Street Art Museum, a collective and self-financed project of urban regeneration, challenged the 'past-ness' of the area by organising street art interventions that covered the buildings where the animals had previously

³⁶ Enzo Venturrelli was a visionary architect of the 1950s and 1960s, who designed the aquarium and reptile house at the municipal zoo in Turin. The construction of the building responded to an expressionist type of external design that recalls utopian-futurist models in urban planning (Venturrelli 1960).

been kept with art works. In 2014, a 'Jurassic Park' was built on the riverbank, when the former zoo hosted the children's exhibition 'Dinosaurs'. In the same period, the dance club 'Hippopotamus' closed. However, it was poor city maintenance and declining municipal initiatives that set the basis for the gradual state of neglect that characterised the area, while also progressively exacerbating the non-integration – both physical and social – of Michelotti Park into the urban design of Turin.

For more than a decade, the former zoo lived in a sort of limbo, a silent permanence regulated by “different regimes of visibility and invisibility”, including media representations and public perceptions of disgust, fear and nostalgia (Brighenti 2008). In 2015, the area became the target of a plan for a biopark run by a private corporation (Zoom S.p.a). Also, between 2015 and 2017 a number of activist groups, including different types of environmental and animal rights organisations, as well as historic landscape preservation groups, have been following the legislative approval of the redevelopment plan. The activists' proposals for action, and their practices of resistance, contained two common accusations: the attempted privatisation of public space and the overall forgetting of the massive protests that took place both at local and national level, two elements that actively contributed to the closure of the zoo. On 15 December 2017, Michelotti Park entered a new stage in its lifecycle, with the public announcement of the rescinding of the biopark plan. The Five Star Movement, the presiding party since 2016, announced a new season of participatory planning for the revitalisation of the park. Activist groups have since redefined their agenda, while starting new interactions with the municipal government and civil society, regarding a remake of the park. In July 2018, the City of Turin organised a public ceremony following the renovation of Giò Park. Yet, fences still keep the renovated playground separated from the other areas, whose future remains uncertain.

THE MATERIALITY OF TERRAIN

Park-goers' perceptions of the very texture of space having changed tells us that the park is made and remade at the edges. Acting as an organic wire fence, with its stonewall, covered with ivy leaves and other spontaneous vegetation, or filling the air with the stench of leaf litter and excremental waste, the edge marks and maintains the different uses, "forms, folds, textures, depths and volumes of terrain" (Gordillo 2018, 54). Michelotti rises over the ruins of a canal that was built in 1817 as an energy resource for the nearby areas. In the early decades of the twentieth century, the canal was covered with dust and debris, and the area became an open space where poplar, willow and plane trees were planted, and leisure activities progressively took place. This transformation cleared the path for the large urban renewal programmes that accompanied political and economic changes, which were affecting the city. Even before the construction of the zoo began, in the early decades of the twentieth century, the area had temporarily hosted the animals used in several scenes of the epic silent film *Cabiria* (1914), directed by Giovanni Pastrone and shot in Turin. The riverbanks were, in fact, a popular site, and they were used in various ways. The river was an essential recreational site for the leisure activities of local residents. However, the park's terrain remained a space that lacked a specific function; it was an "interstitial space" (Brighenti 2016), whose uses and meanings overlapped with the attempts to conceptualise it as a 'traditional', public open space. Another example of this "interstitial space" can be found in archival documents, where geographical metaphors are used to describe the area with a certain degree of uncertainty: sometimes as a park, other times as an open space lined with trees, or as a set of woods. The designation of the zoo radically changed the perception of the area, from a little used and unkempt terrain to a distinctive site of popular, public attraction. In addition, in the 1950s a local butcher's association commissioned the construction of the building that now hosts the 'Alberto Geisser' public library, which further confirms the historical role of urban animals in this urban space.

Park-goers, including residents and casual visitors, recall the zoo and, more broadly, the park as popular destinations during weekends. Although they catered for the Sunday visits of the 'FIAT families and children', the zoo and park were also leisure spaces for tourists and occasional visitors. In many cases the latter remember the zoo when talking about their childhood, either experienced directly or indirectly through fond family memories. The zoo, as a new urban institution, functioned as the emblem of the rising middle class, in a Turin inseparable from the Fordist expansion of the city. The provision of amenity spaces imposed a different aesthetic, introducing sensorial features and rhythms into an urban space where the prosperous workers now had time and money to take leisure. Roberto (45 years old, IC) is one of the owners of a *piola*, a traditional and popular place to eat and drink in Turin, located beside the park. Roberto's parents opened it in 1965, and many

consider it a historic site in the city. Here, you can meet the old and new inhabitants of the Borgo Po neighbourhood. In fact, it is in this place that I encountered many of the park-goers I interviewed for my research. Although Roberto stopped visiting the park when he was a teenager, he continues to watch the flow of park life from the backyard of his *piola*, where one can catch a glimpse of the park and the river. He sat precisely there as he talked about his memories of the park, which he used to visit regularly to play football with his friends, on the adjoining lawns. A vivid detail he recalled was that of climbing the fence in order to retrieve the ball, even without the zookeeper's permission, because it would repeatedly fall down into the zoo during those afterschool games. This 'crossing the lines without permission' created a sense of both trespassing and belonging. In this sense, the zookeepers played an important role, as they mediated the inside-outside, interstitial space of the park and created a familiar place in the neighbourhood. In the recounting of these memories, the role of zookeepers emerged "as a fundamental component of introducing the institution of the zoo and the animal other into the urban space" (Reinert 2016, 31). And Miriam's words, activist in her early 40s, confirms this:

I was posting the fence, where the playground is, with the Assemblea Michelotti advertisements. An old man approached me and asked me what I was doing. We discussed the current situation of the park. He was very sorry about the closure of the zoo and of the park in general. He told me, in a deeply nostalgic tone, that he had worked at the zoo for over 30 years, as a monkey keeper. He used to feed the animals and keep the cages clean. The monkeys were happy and the visitors too. He then stretched his hand and showed me a deep wound caused by working in the zoological garden (informal conversation).

Human and animal noises, along with "the ecology of odors" (McFarlane 2008, 15), are the knots around which the relationships that constitute the interface between past and present – and which takes shape precisely at the park's edge – are organised. As Federico and Claudia's words suggest, the evocation of sensory realities is a crucial moment in socio-spatial transformations:

When there was the zoo, we had problems with the animals, elephants especially. I mean, not only because of the sound they made but because of the unpleasant smell of excrements. I'm afraid, it would be the same today if the biopark stays here but it's better than having nothing. (Federico, manager of the Bocciofila, 70 years old, IC)

I loved to wake up in the morning and see giraffes from my window. I mean I loved that feeling of being in an urban savannah. (Claudia, 80 years old, IC)

A green wall made of centennial ginkgo trees, ivy and other spontaneous plants separates the area from the Po River. Traces of the former zoo (e.g. cages, moats and other buildings), as well as their successive, temporary uses, exist side-by-side – or intermingle – with the remnants of the playground equipment. The most established plants growing on the abandoned space, *Phytolacca Americana* and *Artemisia Annuua*, cover the archaeology of the place and sometimes spill out of its boundaries, at the edges of the abandoned park. The roof of the 'house of the tiger' is almost entirely covered with samples of *Geranium Robertianum* (commonly known in Italy as *cicuta rossa*), a ruderal plant of woodlands and open habitat. It is only by visiting the spot again and again that you can see seasonal flowers and other

non-native plants overlap the organic traces of the hyper-domestication of the park. The materiality of terrain makes various practices of property possible. Indeed, the terrain of urban open space can be understood as a net of property relationships involving a plurality of owners and enacting multiple ways of owning nature; these, as a consequence, have an influence on the spatial patterns of the green space. Urban natures, as Matthew Gandy puts it, “reflect the hierarchies of property and propriety that are extent in the wider society” (2012, 731). Various temporary uses followed the closure of the zoo. Although the park remains under public responsibility, it has been recursively managed under lease agreements by private collective actors: from loosely organised associations to formally registered organisations dedicated to socialising activities (e.g. youth projects and scientific, cultural and political events). The topographical explorations during go-alongs, in fact, threw light on the temporal development of this urban leisure-scape, and unfolded the potentials of walking as a valid instrument to get to know a familiar place and return to it again and again (Kusenbach 2003). Chiara (WI) is 35 years old. We first met along the wall of the former zoo, when she was taking her dog out for an evening walk in the central promenade. After I stopped her and introduced myself as a researcher, I asked if she was available for a chat about the park, and her experience of it. Ethnographic encounters in public spaces are never straightforward, but Chiara was enthusiastic about my project and invited me to join her on her walk. Her descriptions combined individual memories and media representations, as she traced back the multifold histories of the area.

On my way to Regina Bridge I pass Giò Park. An association managed the space, it was a lively playground, but I was a bit too grown up for it; today, I only notice the rusty playground equipment. Someone, I can't remember who, told me that in the 1990s a cultural centre was established in the house of the tiger... Ah, of course, who can forget the scientific exhibition? It was a great success for the city. Here, there is ample parking place. People living in trailers often stop.

For Tim Ingold, the knowledge of the ground “is altered by techniques of footwork” (2004, 331). Seventy-year-old Angela (WI) knows the park's grounds very well. She moved to Turin in 1975, in order to work at FIAT. After she retired, from 2000 to 2012, she volunteered for the association managing the “Hippopotamus”, a dancing club for elderly people. With the closure of the club, the rest of the park also fell into abandonment. She recalls this event as a tragic moment in her life. One day we took a walk together inside the dilapidated park. She was particularly struck by the overgrown vegetation. “This park was so well kept and maintained. I became the second janitor of the park, I used to take care of plants with the help of the gardeners...Look at these bamboos, they trace back to the zoo...I hate them...you-you know they attract rats”. Angela's words not only show that it is important to take into account other forms of urban relations in order to deepen our understanding of what is to count as property, including the relationships between humans and nonhumans, and the practices of care and maintenance that take place in time (Blomley 2016).

Her words also make visible the bordering dimensions of property as the practice of inhabiting a place, by constructing humans and animals as separate in ways that

sustain processes of degradation. The bamboos, once elements of the exotic scenery of the zoo, are therefore reconstituted as an out of order site. It is around the matter of waste, and the related conceptualisations of waste space, that collective senses and perceptions are continuously formed and situated. Material flows are characteristic features of the way the abandoned zoo overflows from its boundaries into the “material excess” and “re-contextualization of things”, especially through weeds, rubbish and objects (Edensor 2005). Every day Antonio (in his early 50s, IC) walks with his dog along the central promenade and down by the riverbank. At various times, he stops to look around and smoke a cigarette, careful to keep the former zoo out of his sight. However, the uncontrolled growth of branches, the consistent amount of leaves and the residual objects that he observes in the park, and through the fences of the former zoo, affect his sensual and emotional encounter with the park. “For me, it’s as if the abandoned park overflows and runs into the city. Waste disperses. It’s such a shame. I would like to burn this park.” His hands slide over his belly, the fingers pointing to his stomach, as he says, “it’s disgusting”.

Waste is thus a peculiar feature of the deployment of discourses of blight and obsolescence in terms of a decisive, material logic involving different bodies as well as the corporeal dimensions of space. Furthermore, it is around fences and barriers that the everyday discourses about the park have been framed by multifold acts of looking, scrutinising and monitoring. In the central promenade, a fenced playground sits next to Giò Park, while the old fence that separates the two spaces gathers the grievances of local users, who lament the blight condition of the former zoo area. In these instances, the ‘ex-zoo’ (as the area is called in Italian) is the geographical synecdoche that substitutes one portion of the park for the whole area. Interestingly, this playground is where the majority of park-goers stop, sit or stand to play and converse. The playground not only “territorializes children’s play” (Brighenti and Kärholm, forthcoming) by regulating “the rhythms of playing together”; it also synchronises the rhythms of a mundane leisure space, and of the ruined playground. The graffiti-decorated wall that marks the perimeter of the former zoo is a place for teenagers to rock-climb. It also serves as the site where strollers often stop to look out on the dilapidated park and recount histories, located somewhere between nostalgia for a fondly remembered past and anxiety for the future.

AT THE CONFLUENCE OF LAND AND WATER

The linear path along the bank of the river is an open space of informal greenery, characterised by spontaneous riparian woods, where the seasonal changes of the river embankments form gentle slopes and beaches. Between spring and summer,

these turn into an extraordinary place for picnics, romantic encounters, chance meetings with mallards, herons and geese, and also a playground for children and dogs. Martina (WI) is 45 years old and lives in the Borgo Po neighbourhood. During the warm season, she visits the river's edge almost every day to play with her dog. She encounters "the little beach" (as Martina and the majority of the park-goers call it) on her way to the historic area of Sassi, where a large meadow along the riverside provides the perfect spot to play. She joined me on a walk on a sunny afternoon of mid-September. A lush pile of *Cyperus Glomeratus*, one of the most common plants in this area at the confluence between land and water, hampers her steps as she moves towards her dog. The mobility of water creates, through its liquid, a powerful convergence among different ecologies and experiences of place. While the bridge establishes a transitive connection between the Murazzi waterfront area and Michelotti Park, it is the movement of the river that scours the banks, and in doing so, ties together different riverine historiographies.

It was a cloudy afternoon of 7 September 2017.

When walking across the Vittorio Amedeo Bridge, I usually stop in the middle to look out over the Superga hill, like a ritual, in order to get ready to 'enter' the field. I stand grasping the rail, trying to follow the stream of sensations, but I can't concentrate for more than a minute. I hear the river's soundscape colliding with car honks while smoke pervades the air and the blue-grey light. My eye reaches the river again.

Two bridges (Vittorio Amedeo and Regina Margherita) connect the banks on either side of the Po River. After crossing the river, by walking across the Amedeo Vittorio Bridge, one can follow a pedestrian and bicycle trail through Michelotti Park. However, groups of people concentrate near the bridge, which becomes the subject of countless photographs, from family snapshots to professional photo shoots. The panoramic views of the river, the hillside and the Basilica di Superga make this place the ideal photography location, together with the Murazzi waterfront area. A kind of lake takes form between the hillside and the left bank, as the weir of the Michelotti dam holds back the weight of the water that accumulates behind it. Through the artificial drop, water takes force again flowing towards the confluence between the Po and Stura. Life in these places revolves around the search for, and the touch and visual pleasure of water, in ways that vary according to seasonal changes, and especially to heavy rains and droughts, which have strongly affected the region in recent years. The title of a newspaper article published on 4 August 2018, "Murazzi, drought in the Po unveils blight",³⁷ lends a specific character to the objects discussed in the article, by locating *degrado* 'in' the material substance and movement of water.

Changes in the flow and quality of water compel people to engage with the landscape in the present, and think about the future of the area (Gagné and Rasmussen 2016). Recurrent floods burst the banks, leaving large amounts of plastic bags, trunks, branches, mountains of sand and other objects on either bank. Historical archives trace the most dreadful flood events back to 1839; after a year of

³⁷ Coccoresse P. (August 4 2018). *Murazzi così la secca del Po svela il degrado*. Corriere Torino.

intense drought, the city's rivers overflowed violently, and even the Michelotti Canal was ruined. The most recent event is that of the November 2016 flood, during which Valentino and Valentino, two touristic boats anchored at the Murazzi waterfront area, were damaged. Not only water excess, but also intense periods of drought and mismanagement of dams have had a dramatic impact on water levels during heat waves. The image of hordes of seagulls and cormorants searching for food has increasingly become a source of anxiety about the environmental deterioration of the riparian ecosystems. Dario (in his early 60s, IC), an activist from Pro Natura, never minces words to proclaim that the ecological catastrophe is wholly man-made. The project for the construction of a hydraulic power plant, which would improve navigation but came to a grinding halt in 2015, felt like a great victory to local environmental associations. However, as Dario says, "my perception of the Po River is that the most important river of Turin is like an orphan with many fathers". Dario's words reveal much about the precarious relationships between the river and the city as seen through the eyes of locals.

Valerio (IC) is 75 years old and lives in the Vanchiglia area. He has decades of fishing experience and knows the Murazzi waterfront very well. On the opposite side of Michelotti Park, the Murazzi waterfront played a decisive role in the development of Turin (see chapter 2 for further detail). Here a public promenade was inaugurated, with a path leading down to the riverbank. This is Valerio's favourite fishing spot, which displays his intimate relationship with and deep knowledge of this stretch of water. He stands at the beginning of the slope, holding the fishing rod and staring at the water, which, beyond the Michelotti dam, shows its currents and waves. The attempted renovation of the dam contributed to the increased fragility of the riparian ecology. "This dam was a complete failure; it killed everything here, it's almost impossible to fish anything out now". The Moschino Village was a settlement founded in the early nineteenth century, which was subsequently inhabited by several marginalised groups, including a fishing community, sex workers and ex-felons. After their eviction, the village was destroyed, and between the 1830s and the 1870s the construction of the Murazzi waterfront area began. The arcades of the waterfront were built to cater the working activities of laundrywomen and sand collectors, and also to allow storage and embarcaderos, for boat rides on the river. Between the 1950s and the late 1960s, fishery and the recreational use of water were progressively abandoned due to the increasing pollution of the river, and the area was for a long time stigmatised as 'blighted' and unsafe.

Consequently, as Silvia Crivello suggests in her account of the spatial dynamics of Turin by night, local authorities implemented a strong policy of security, through the showy display of policemen combined with the massive concession of authorisations for the opening of bars, pubs and discos; this made the river waterfront one of the main nodes of Turin's nightlife from the 1990s onwards (2011, 717). In 2012, the waterfront became the subject of a corruption scandal involving local politicians, in relation precisely to the concession of authorisations. As a consequence, the City of Turin forced the closure of all clubs. "The Murazzi are dead, hail to the Murazzi", was the slogan of a protest demonstration against the closure of the nightlife area. Over the last five years, the riverfront has served as an open space for people going

on walks, chilling out, reading books, smoking joints or catching the last sunrays on an autumn morning. Its population of users can vary significantly: from elderly people, adults, families or teenagers living in the adjoining neighbourhoods, to occasional visitors, tourists or dwellers coming to visit the historic city or hang out in the bars near the Amedeo Vittorio Square.

Amphibious vegetation at the confluence of land and water plays a pivotal role in the regulation of perceptions of the landscape, in the context of environmental change. Spontaneous woods of riparian plants grow in the crack of the river embankments, and along the stairs leading down to the river. The alarming algae bloom (*Myriophyllum Acquaticum*) during the warm seasons becomes the subject of common interest, regarding the changing quality of water as well as the impacts of climate change. The qualities of land and water are mutually constitutive in the production of discourses about and feelings of *degrado*. These aquatic plants are considered invasive and harmful species for the riparian ecology. In this sense, a public initiative held in 2016, involving local politicians (including Mayor Appendino) and technicians from ARPA (the Italian National Environmental Agency), worked abstractly and concretely as a way to remove the sources of environmental degradation. Federico (IC), 50 years old, doesn't visit the Murazzi very often. He sits on the grassy banks, staring at plants growing in the cracks.

F: After the Regina Bridge the riverfront is well kept, then abandonment starts.

Me: What exactly do you mean?

F: Not exactly...this place is calm, I love the panoramic view of the hillside but...look, look...at these weeds! Before the floods, it was even worse than it is today. I remember phosphorescent algae emerging from the water. They looked as if they were retro illuminated. Fortunately, the flood washed them out, otherwise they could be anywhere by now. In the end, the flood does what the Municipality should have done (laughs).

These amphibious environments are the points of encounter between the histories and atmospheres of degradation. The linear path along the riverside at Michelotti Park used to be an important recreational site for the local residents and occasional visitors, who visited the river's edge for their Sunday baths in the Po. In the late eighteenth century, municipal by-laws imposed hunting bans in the surrounding hills, in order to protect the nascent public baths alongside the banks of the Po. This event marked the (fairly late) discovery of the delights of the riverbanks near the historic core of the city. Nowadays, it is not that common to see people taking a bath in the river, for when it happens it becomes a public event, as in the case of the Big Jump European River Swimming Day, an initiative organised by Legambiente every year in July and held in Turin on the right bank of the Murazzi waterfront. However, mundane stories speak more of the processes of environmental subjectivities and embodied political ecologies of *degrado*. Indeed, water becomes part of the bodily memories of the people who regularly visit these places. Olivia (IC), 37 years old, lived among the ruins of the former zoo between 2016 and 2017. I first met her while wandering in this area; she was sitting on the bench near Giò Park, when we first made eye contact with each other. The second time I met her, she was hanging her clothes to dry outside the former 'house of the tiger'. When she smiled at me I, too, smiled and introduced myself. Olivia told me she had been physically abused by

her husband. After spending a short period of time at a women's shelter, she arrived at Michelotti Park in early 2016. She asked me to join her on a walk outside the former zoo, on a sunny morning of 24 July 2017.

O: It is boring here, but it is the only place where I can stay for the moment; the women's shelter is full. I feel unsafe...there are only men living here. I'm always on the alert and hyper-vigilant, I can't relax, I can't poop! The darkness suffocates me sometimes.

Me: How often do you take a walk outside?

O: Hm...Not very often. But two days ago I bathed in the river, where there's that little beach...back here...(Pointing to the path on the right, when we were just outside the hole in the fence of the former zoo).

Me: Yeah...Yeah...How was it? How did you feel?

O: It was so good; it was very relaxing and refreshing. But then a police car arrived and I had to run away. I'm sure someone saw me going out of the park and called them (sighs).

Water must be considered a substance that not only has a material presence, but which is also tied to the social imaginary of the dynamics of propriety in relation to the practice of space. The life of the former zoo becomes translocal. Its experiences and affective atmospheres move across multiple places and bodies, real and imagined. Water, through its movement, demarcates the exclusion of undesired and vulnerable bodies from space. But water also crystallises and enlivens memories. Everyone in this area knows Giorgio and Mara (both in their early 80s, informal conversation), because they usually take a bath along the right bank of the Murazzi waterfront. I first met them when walking by the riverbank on a bright morning of early May, 2017. It was a windy morning, the delicate foliage shivering in the breeze, causing a pleasant rustle in the mild air. They were sitting on a concrete bench, their faces exposed to the sun. As I approached them, Giorgio – dubbed 'the pirate' by his wife, by virtue of his dark-coloured skin – plunged into the water while singing "wind, wind, blow me away". They are very affable persons, and so the conversation easily started. "I have a funny story to tell you", Marta said.

When my brother deceased, I used to wear a little black dress. One Sunday morning, Giorgio and I decided to go out for a boat ride on the Po with his new boat. You-you know...He often says that he was born here...his parents worked at the Murazzi as fishermen. That morning, the dog was at the stern, I was lying down...and that black dress (laughs), and my husband rowed. You know...he knows the Venetian kind of rowing. A journalist from La Stampa took a picture of us! (laughs).

Processes of material decay serve as emblematic ways of re-examining our understanding of temporality, the convergence of material and personal memories, as well as sensual, emotional engagements with the past (DeSilvey and Edensor 2012). Giuseppe is 45 years old and lives in the Vanchiglia neighbourhood. He is a regular visitor of Michelotti Park, where he comes to walk his dog and meet his friends. They repeatedly walk the central promenade, and sometimes stop to sit on the bench near the library. He was still a boy when his family moved from Sicily to Turin, in the 1970s. His memories recount histories of migration and racism, as when he recalls the time he and his family slept in a car under the Isabella Bridge. One day he accidentally fell into the river while playing. The man who saved him remained unknown until he asked a TV show to help him find his rescuer, and he eventually succeeded in meeting him.

Animal geographies of the past, present and future confound the image of a mosaic type of landscape, where practices of domestication lay out a social terrain defined by its relationships with the ecological spaces of the wild (Brighenti and Pavoni 2018). Pigeons, geese and mallards visit the banks of the Po River to domesticate and exploit humans in their search for food. The geographer Jamie Lorimer (2015) talks about “nonhuman charisma” to describe organisms that inspire public affection (compassion, distance, repugnance) by visual perception. The ‘pursuit of pets’ around Michelotti Park shows that wildness becomes more acceptable through proximal encounters between animals and human feeders, and opens new ground for observing human engagement with and negotiation of processes of environmental change. Indeed, the discursive affiliation of blight with wildness, in the form of spontaneous vegetation and wild animals, is not always a neutral backdrop of neglect and absence of control.

Degrado is not a fixed attribute of bodies and places, and can generate various affective responses. At times, it appears to be negotiable or, conversely, to create clashes between river ecologies and human interests. For example, the case of *myocastor coypus*, semiaquatic rodents originally from South America but introduced in Italy by fur ranchers, reveals the complex attitude of humans towards wild animals: depending on the public and scientific representation of their reputation as dirt, waste or nuisance. Near Michelotti Park, the *coypus* have become a popular attraction for lonely seniors, despite the public warning against this species, considered sources of bacterial infections for other animals, humans and water. Giovanni (IC) is a 70-year-old retiree. He is one of the *meridionali*, as southern migrants were called, that arrived in Turin to work at the FIAT factories. Since staying at home can be boring, he says, he prefers strolling by the river, sitting along the grassy banks and feeding the animals. Recently, he also built a small fence to let children play safely with the *coypus*. These instances show how “the *improvement* of animals through domestication”, in fact, “helps to put various natures under control in the city, as well as regularizing deviant human others and spaces” (Atkins 2013, 15). *Degrado* also relates to the significant role of human feeders in urban environments, and their implicit attempts to domesticate portions of unplanned nature.

SEEING THE AIR

I’m cycling through the city for a night tour at Michelotti Park. I get off from my bicycle, my eyes itching and my throat scratching, as when you are outside in a smoggy area for a long time. The white fog suffusing the air is a familiar image in the park and, more broadly, in the city at night. There are almost no people in the

central promenade, not even dog walkers, except for Miron. Seventy-year-old Miron (IC) was not new to the streets at the time I met him. He is originally from Galati, Romania, and has been homeless for the past decade, having lost his job and subsequently also his home. After moving from one place to another, he decided to stay in Michelotti Park, in the shade of the canopy that covered the ticket office of the former zoological garden. Everyone knows Miron at Michelotti Park, and many park-goers think he is the park's janitor; they help him by providing food, medication and clothes. Large cardboards offer him a place to sleep and eat, while a small fountain provides him water to wash himself and do the laundry. That night, he was sitting on the front bench. "The air is still and heavy!" he exclaimed. Not far from the path of the central promenade, near the balcony looking out over the river, a glance of yellow, grey and red lights suffused the whole sky. The thick haze and smog, hanging over the city like blankets of fog, is typical of accounts of the contemporary city, where safe limits of fine particles and nitrogen dioxide are regularly exceeded for several days, especially during the autumn and winter months. As Legambiente reported in the book *Mal'aria* (2018), Turin is among the nine Italian cities with the highest level of air pollution in 2017.³⁸ By the end of October 2017, wildfires in the Val Susa region reached the edges of Turin, an incident which dramatically increased air pollution in the city. The night sky produced some stunning images, unveiling colours people didn't even know existed, and tried to capture around the city.

Corporeal experiences of, and anxiety about, degraded air quality are common amongst park-goers, who often take the experience of the air to centre stage when they speak of Michelotti Park. People often bypass the park due to the noise and close proximity of heavy traffic, despite the many aesthetic advantages and health benefits that the canopy provides residents and park-goers. Since the late nineteenth century, Michelotti Park decisively contributed to change the nearby area, where many proto-industrial activities (especially small factories and mills) were located. Rows of plane, elm, willow and ginkgo trees offered relief from the growing asphalt jungle of the industrial city. Moreover, they asserted the importance of the aesthetic and hygienic function of urban trees and tree planting, as a means of providing healthier environments and recovering from the 'bad air' produced by urban and social transformations, and also by the engineered systems used for the supporting of urban activities. At present, the protection and safety of these urban trees are at the forefront of improvement and heritage discourses. A remarkable example is the case of the historic plane tree number 58, located within the former zoo area; it became the subject of activist claims about the park's heritage value. Although the everyday experience of air may be largely unreflective, it nonetheless anchors in space, conditioning how people feel, practice and move through space. In this sense, the experience of airlessness at Michelotti Park, Adel sustains, not merely reflects a lack of oxygen, but a mix of anxiety and paranoia. Adel (IC) is 38 years old and is originally from Casablanca, Morocco. I first met him when he was living in the zoo's former ticket office, which he painted pink with the help of the Be Bonobo group, an

³⁸ Legambiente is one of the country's leading environmental organisations.

itinerant collective of artists and musicians from Berlin. They did a step over in Turin, and particularly at Michelotti Park. However, the extra police attention in the area, by way of frequent patrols, spurred both Adel and the Be Bonobo group to move to another place.

Adel: I loved to live in the park and sit outside while smoking a cigarette, glancing up and down at plants, which reminded me of my parents' garden. I remember the tree's shade...it was wonderful, although sometimes I felt that I wasn't getting enough air.

Me: Why? Do you feel that you are isolating yourself?

Adel: The tall trees, plants and structure block views into the park. You know, it can be very dark at night and I was paranoid that the police was controlling me. I prefer to stay nearby the river, there's more air, although this river is a shit, the smell can become quite awful.

As the anthropologist Tim Choy writes, and the case of Michelotti Park confirms this feeling, "...there is no air in itself. Air functions instead as a heuristic with which to encompass many atmospheric experiences [...] Thinking about the materiality of air and the densities of our many human entanglements in airy matters also means attending to the solidifying and melting edges between people [...]" (2011, 12). In this sense, 'bad atmospheres' can also be understood through the ways people value and 'feel' Michelotti Park, and how they question urban interventions by expressing their anxieties and aspirations with regard to their experience of the park. The repeated police patrols show that disorder defines the institutional framing of the place, thereby reinforcing common perceptions that render this space useless and disreputable. The result of this is huge media coverage, according to which the 'signs of *degrado*' are haunting the life of Michelotti.

The idea that the park lost its vibe, particularity and vibrancy is very common amongst park-goers, including residents as well as occasional visitors. Through the notion of *degrado*, park-goers bring the atmosphere of boredom into discussion by using boredom as a slogan for general uneasiness, and also as a state of impassivity, a watching aimlessly and waiting. Viola (36 years old, WI) is a long-time resident of the Borgo Po neighbourhood, although she recently relocated – with her husband and two daughters – to the Sassi area. Michelotti is closely linked to her childhood memories, as she used to visit the park while studying as a teenager at the municipal library.

Viola: I don't take walks here anymore, this park gives me negative vibes...

Me: How would you describe this feeling?

Viola: Well, it's not easy to explain...Perhaps it's because of the abandoned zoo...you-you know (she gives me a faint smile), I'm a coward; or, maybe it's because the space is very fragmented...you-you see these different levels. It really matters to have a kind of openness towards the river. The asphalt is all broken up...plus the playground stinks. After a tour with my four-year-old daughter, she gets bored and I get bored too (laughs). I don't know, I can't really relax here.

Me: In what sense?

Viola: This is a nice walking path and it is really helpful when you reach the historic city. There is also a shade tree covering the routes, which is very pleasant especially during the warm season. However, in order to avoid the heavy traffic, you have to choose an alternative route, the path along the bank for example, because...you know...the bicycle path alongside Corso Casale...it's awful...every breath you take, the smog blights you.

Many people who used to visit the park on a regular basis almost stopped using the park because they felt as if “there [was] nothing to do”. Some argued that “it was a dead” and very depressing zone, because there was hardly anything livening up the place. The library, a small bar and a bocce club are the only businesses that still operate here, but the common perception of these places and, more broadly speaking, of the neighbourhood is that they have isolated and banished themselves from the rest of the park. Figurative atmospheres come to shape, and take hold of, public feelings that accompany socio-ecological and wider urban changes, by affecting the area’s reputation and the way park-goers experience these shifts. Forty-year-old Giovanna is an educator in a local community centre, and regularly visits MP to take the children outdoors on spring mornings. The first time I met her, she was standing near the playground watching the kids. She expressed an anxiety about something “being lost” or “taken away”. “To be honest this area is a black hole, a wound that hurts” (informal conversation). During those conversations with research informants that took place along the central promenade, they repeatedly turned their heads towards the stonewall surrounding the former zoo, exclaiming expressions of regret and sorrow. They typically expressed the problem using the sentence. “I can’t stand seeing the park in this condition. Those recurrent processes of abandonment are a drag; it seems to last very long and it is very boring”.

The proposed renewal of Michelotti Park became the subject of intense community interest, regarding the manners through which to ‘reanimate’ the atmosphere of the park. Indeed, it was around the notion of animation that discourses of improvement were framed, sustained by ideas of a mere disused place waiting to be re-adapted to the urban fabric. From this perspective, privatisation seems to be one of the ways to conceal the nuisances produced by the ‘blighted area’. However, research informants commonly referred to previous visits to the park, and associated these with close family relationships, such as parents who accompanied their children to the municipal zoo, to Giò Park or to the various events held in the park. The ‘heritage feel’ of the site is very important in maintaining the park publicly accessible in the face of privatisation, and this value was also expressed by way of different forms of sociality and relationality, which spontaneously animated the public space.

DARK ECOLOGIES

The Mayor turns off the light at Michelotti Park. The park stays in the dark as measure against blight and night bivouacs.³⁹

³⁹ Guccione G. *La Sindaca spegne la luce al Parco Michelotti: Area al buio contro degrado e bivacchi notturni* (La Stampa, September 1 2017).

From late August to December 2017, the linear path along the bank of the river has been the target of a municipal by-law, whose primary aim was to curb access to the path and to the ruins of the former zoo. This by-law was a response to the reported level of public insecurity and disorder that seemed to characterise the area, caused by the presence of homeless people, illegal activities, as well as the risk of injuries from falling trees and branches due to unmaintained vegetation. Paradoxically, the use of darkness to tackle decay brought to light the contradictions inherent in the regulation of space, and indeed darkness, as a modality of politics of space; this implies that a public space is regulated by way of official norms that curb access to it. The evolution of municipal ordinances, as explained in the previous chapters, depicts the “night as a frontier” (Shaw 2015; Melbin 1978), where the supposed disorderly dimensions need to be monitored by different forms of prohibitions; this happens, for instance, in relation to the patrolling of certain streets overnight or, as in the context of Michelotti Park, the imposition of curfews. Gloom becomes a way of ‘staging atmospheres’ of *degrado*, through the official attempt of cleansing – through darkness – the spatial markers of the disorder of the place (Patrick 2014; Tonnelat 2008). The ordinance has thus restrained access to the former zoological garden and to the linear path after 8 p.m., and it has cut off the provision of water and public lighting in order to discourage people from occupying the ruined buildings of the former zoo. This use of night spaces shows how the meanings of darkness in the urban environment could be “multiple, overlapping and contradictory, incorporating the myriad of social processes that constitute it” (Williams 2008).

Each season is a good time to enjoy this path. Then look at the municipal ordinance exposed on the sign, where it says something like ‘it is forbidden to walk the path because of the absence of light’. It makes me laugh. It makes me laugh but perhaps we should cry, I don’t know. It wasn’t super smart. You spend money for light and you improve safety and livability in one part of the city, where people spend time hanging out. Conversely, you save money on light and then you have to invest it in neighbourhood policing (Susanna, 44 years old, lifelong resident of the Borgo Po area, commenting on the official sundown curfew at the park during a walking interview).

The case of the disappearance of light at Michelotti Park reveal the role mayoral ordinances play in terms of surveillance and prevention strategies that are embedded in urban planning practices; they contribute to the reinforcement of social codes and the spatialisation of fear, and their use is often justified by the absence of transparent planning interventions (Tulumello 2017).

Susanna’s words also show how the paradox of the embodied experience of *degrado* raises the question whether the orchestration of atmospheres of blight is shared by the park’s users, and to what degree the actions and moods encountered comply with the users’ anticipations, on the basis of which this atmosphere was staged. Responses are varied. As Laura (early 30s, IC) says: “It’s too dark, and anything could happen, nobody could hear or see you from other parts of the park. I used to come here for night-time walks with my dog, I used to meet other adventurous dog walkers like me.” For many dog walkers, the municipal regulation has, in fact, put an end to evening walks and to a place socially perceived as essential for ludic

experiences, as also for its ability to accommodate diverse desires. Often ‘atmospheric engineering’ practices aim to secure particular types of public spaces by reproducing securitised, conservative and masculine imaginations of public order, which threaten the playful potentialities of public space through a “gendering of exploration”, as DeSilvey and Edensor argue in their study on ruin exploration movements (2012, 476). In this sense, darkness increases the marginalisation of vulnerable populations and reinforces social codes associated with night spaces, epitomised by the sentence ‘I better not be around there at night’, as many female park-goers exclaimed during our talks. Light and darkness contribute to shape certain types of atmospheres that, while being indeterminate, are powerful in defining what is right or wrong.

Bodies (especially those of women and migrants), as the historian Rebecca Solnit writes, are in turn divided into “nocturnal and diurnal species” (2001, 238), merely because they appear in the times and places associated with criminal activities, illicit romances and political contestation. Over time, the uncertainty and physical fragmentation of the place seem to have intensified. The formal park area has become the stage of a controlled urban life, where the social and symbolic barriers that divide the portions of Michelotti Park are simultaneously reinforced and blurred by the movement of persons, objects, animals and vegetation. In considering this fragmentation dynamic, it is light – sensed through its ceaseless interaction with the landscape – that blurs the separation between the internal and external parts of the former zoo area. During my ethnographic visits to the dilapidated park, I often met some of the people living in the ruined zoo buildings, and also occasional visitors. I rarely delved into deep conversations with the visitors, as a primal feeling of fear appeared to keep us at distance. However, other kinds of encounters became possible over time. Recurrent visits to the park during daytime helped me apprehend the materialities and moods associated with the night-time. Solitary walks at Michelotti Park showed me the potential to learn how to navigate the perceived dangers of the park, with fear becoming a minor element of my everyday awareness of and interactions with passers-by.

Rhetorics of *degrado* and nostalgia frame Michelotti Park as a place ‘living in the shadow of the past’, haunted by sentimental memories, feelings of grief and disgust. The derelict site becomes particularly problematic as the formerly cultivated space – through its unconfined growth – spills out of its boundaries, reducing visibility and creating dark spaces. Nevertheless, even before the construction of the zoo had begun, the area’s reputation in relation to vegetation was ambivalent; the woods were considered grim and insalubrious, populated by the phantoms of the dead found in the canal. Elsewhere, the park has been described as an evocative place for lone walks. The writer Emilio Salgari, who lived nearby, seems to have had epiphanies that inspired his exotic fictional works while walking to that shady garden surrounded by tall trees. Haziness and obscurity shape, distort and reconstitute the ways in which people experience the contemporary park, by evoking the negative associations that Western civilisations historically connected to gloom; physical disorder, fear, deviancy and victimisation (Edensor 2017). Despite the

recurrent pursuit of renovations and uplifts of the area, discourses persist that repeatedly describe Michelotti Park as a place ‘with a strange light’. Within these discourses it is defined by a condition of marginality, “as if the periphery had moved to the city centre”, as a philosopher and art curator from Turin suggested while taking me for a walk around the park’s graffiti, during the renovation of Giò Park in September 2018.

These words suggest that the experience of Michelotti Park also distinguishes itself by the divergent geographies of sunlight that radiate upon it, and to which people unceasingly become attuned. The sunlight condition of the park, as well as the presence of centuries-old plane trees, greatly influences the shadowy qualities of the area; trees are a key factor in consolidating the perceived positive value of Michelotti Park during peculiar weather conditions, such as the cooling effects of trees or the evapotranspiration of leaves that catch the falling rain. During the daylight hours, in particular, Michelotti Park often sits in contraposition to the Murazzi waterfront area, where the luminosity attracts a wide number of visitors, leaving an impression of the promenade as a place with a different rhythm of life. This, in turn, evokes positive emotions, as the presence of people is, in many cases, positively associated with safety. At the same time, however, an interesting parallel emerges between the practices and meanings of night-time at Michelotti Park, and those of the Murazzi waterfront area. On the one hand, the closure of the Murazzi waterfront area – where many clubs were located – in a way symbolised the incremental fall into darkness of a nightly “playscape” (Crivello 2011), and the destruction of a consumption-led urban regeneration. On the other hand, the repeated evacuation of the temporary autonomous zone at Michelotti Park, between 2016 and 2017, foregrounded the contradicting relationship between darkness and power; controlling the movement of bodies at night becomes a way to restore the identity and cultures of urban spaces, as “the demimonde of the city comes up” (Edensor 2017, 189). The case of Michelotti Park thus shows how the presence and/or absence of different illuminating technologies marks the spatial organisation of space, as well as the channelisation of modes of perception, by ways of surveillance and contestation practices based on darkness.

Formal and informal attempts to establish so-called “normative ecologies” (Brownlow 2006, 234) – that is, areas discursively affiliated with control, order and maintenance – beyond their ecological impacts, always have social and political implications both in the everyday life of urban routines, and in the various strands of civic activism around Michelotti Park. Another example of the way light connects phenomenology with meaning is, in fact, the activist case of Michelotti Park; the latter must be understood as a way in which human engagements with the place help ‘shed new light’ on the governmental practices of the space, as well as on the hidden or invisible interspecies stories of the park. For instance, Michelotti Park is a location for amateur botanists’ excursions. These urban botanist explorers are anti-speciest activists who, through the discovery of the ‘botanical inhabitants’, experiment with the potentials of a spontaneous and libertarian place of freedom. They create the basis for an imaginative reinterpretation of the urban space. The

activist case of Michelotti also shows how light can be symbolically and materially interpreted as a mode of ‘illuminating’ cultural practices of nature, while at the same time ‘raising’ civic awareness about the value of a place. The emergence of the association ‘Assemblea Michelotti’ can be seen as the product of this period of civic mobilisation. Contrary to formal organisations, which constituted the majority of the participants in the ‘No Zoo Committee’⁴⁰, the necessity arose to develop a grassroots form of activism, in which deeply engaged activists and common citizens could participate.

During the association’s meetings, I had the opportunity to analyse how local activists interpreted environmental revitalisation, and how different ideologies underpinned the socio-cultural creation of new urban natures—and along with that, the redefinition of the park’s ecology. Concerns not only related to the aesthetic characteristics of nature; a heightened problem regarded the ways in which the decay of the former zoo was affecting the adjoining areas, and also the discourses and regulatory practices devised to govern social life. Uncertainty in the levels of public participation, and different priorities among common citizens and activists, emerged in public debates, bringing to the foreground the ideological dimensions that underpin urban natures, as well as the divides in the political project of Turin’s environmentalism. These emerging cultures of nature and leisure space on display provide an additional angle from which to view the metamorphosis of the industrial city, through the forms of specific cultural and ecological valorisations of nature. Some citizens and activists are radically rethinking the meaning of nature in the city by rejecting the idea of a massive cleansing intervention, which they claim would dismantle an ‘island of biodiversity’, and also its threads of memory; other groups show a preservationist ethic, which combines a traditional approach to the conservation of wildlife with a priority for social and spatial order. Yet, local activist groups are not residents of the area. In the activists’ stories, everyday residents and users seem inexistent. Indeed, low levels of citizen participation reinforce common perceptions of Borgo Po as the elegant, residential and bourgeois neighbourhood that never really cared for its park.

FLOATING FUTURES

⁴⁰ Following the May 27 public demonstration in 2017, the case of Turin’s biopark rapidly gained attention at both local and national level. *No agli zoo, no alla svendita del patrimonio pubblico, a difesa dell’ambiente e dei beni comuni* was the catchphrase of the national protest demonstration, which claimed ecological awareness, defence of public space against privatisation and demands for biopark’s closure. The promoter was the ‘No Zoo Committee’, which included non-governmental organisations in the field of environmentalism and animal-right activism.

The life of Michelotti Park entered a new stage in its lifecycle on 1 July 2018, with the inauguration of Giò Park. The Five Star Movement celebrated the beginning of a new season of participatory planning for the revitalisation of the park. Activist groups have since redefined their agendas, while starting new interactions with the municipal government and civil society about the remaking of Giò Park, and the remaining portions of the Michelotti Park. The ethnographic exploration of Michelotti Park has shown it to be a public space of “agitated togetherness”, contingency and ambivalence, which articulates different levels of struggles and expressions of desire. By attending to the political ecologies of atmospheres and the representations of the embodiment of processes of *degrado*, in particular, I have highlighted how processes of ruination are naturalised, sustained and reproduced in everyday life. Within this context, discursive and corporeal affiliations with waste are negotiable, unpredictable and contradicting. However, indecision, care, discovery, excitement, fear, anxiety, boredom and nostalgia can be practices of resistance that make way for a reconfiguration of a supposed messy landscape into a space of complexity and multiplicity. These affective entanglements also provide a challenge to the reorganisation of persons as *victims of waste*, while highlighting the potentials of ordinary affects and sensory experiences to create transformative articulations of publicness and interspecies alliances.

Moving through the present and past circuits of routine practices and memories, my case study of the park shows that environmental changes do not correspond to a sequential organisation of periodicities. In Michelotti Park, the particular path from being derelict to being in use is not as simple as a transition from renovation via abandonment to reinvestment. In the vicissitudes of many post-industrial cities of the West, one can notice the difficulty of bringing a new future into being, which becomes visible through spaces that ‘litter’ the ordered city. As a response, organic imaginaries of regeneration offer attempts to piece time and space back together into a framework of spatio-temporal linearity, which limits the possibility of creating awareness of the politics of socio-ecological change, and with that the possibility to experience time differently.

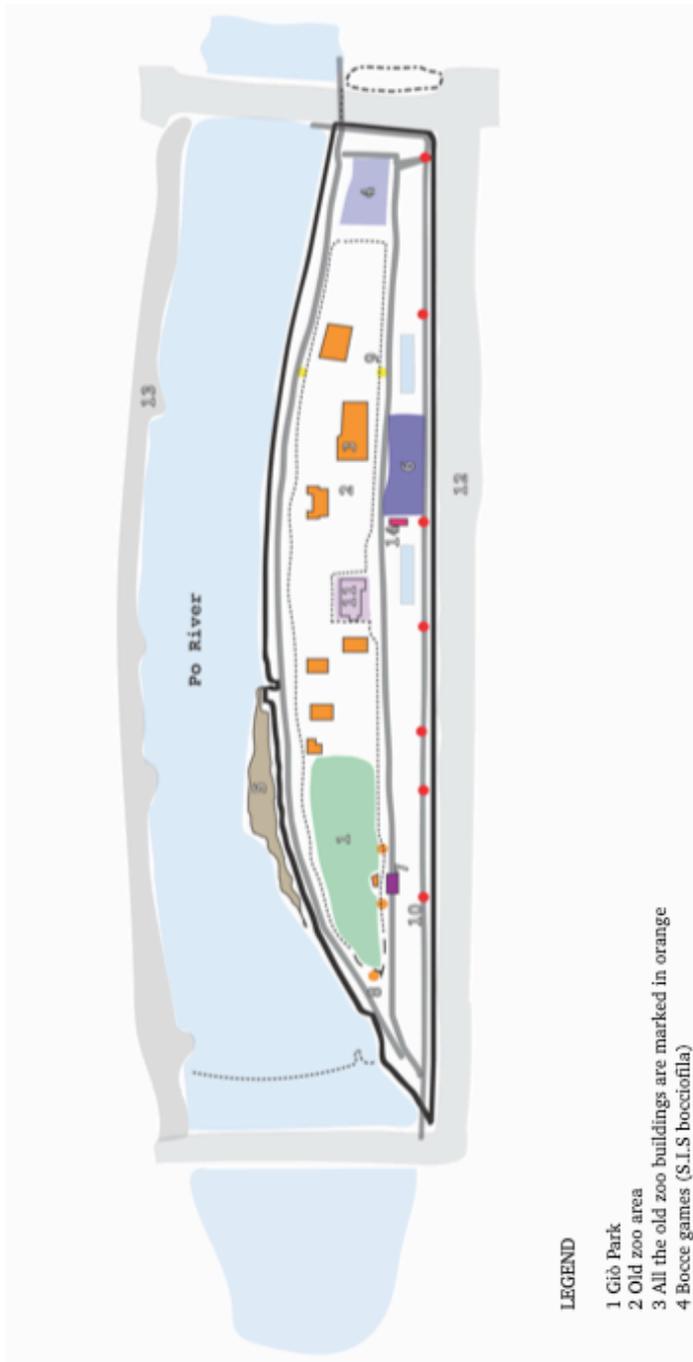
Indeed, urban political ecology and atmospheric studies, rather than explaining what a prevailing construction of temporality can *be*, have examined what a dominant articulation of temporality can *do*. In this way, Michelotti Park has shown that time cannot be mapped onto space, but is part of the formation of the landscape. Multiple temporalities form many different cultural expressions of industrialism and post-industrialism, by showing the present as a temporal collage where ideas, natural flows, material traces and sophisticated systems of technologies circulate and come together in a continuous process of recombination. At Michelotti Park, material traces have shown the potential to extend chrononormative conceptions of temporality. The meanings and uses of traces are unstable, dispersed and always becoming something else. Nonetheless, the stories about Michelotti Park also suggest that the meanings of traces can also sediment and stabilise through the everyday work of sensory memories, as well as through the politics and the privilege of histories through which pieces of the present and the past become absent or constrained. In this way, we might suggest that micro-stories and geographies of

waste spill out a particular sequence of abandonment as a single event along a chronological line of time.

Initially, the attempted privatisation of Michelotti Park was illustrative of the transition from an industrial to a post-industrial zoo, which reflected a re-appropriation of the Fordist approach to the design and planning of nature and amenity spaces in cities. It confirmed a vision of metropolitan nature that retained the boundary between nature and the city, through the creation of a landscape of consumption functionally and visually separated from residential areas and workplaces. Following the approval of the official guidelines for the redevelopment of the old zoo area in January 2019, although there is support for a public green space, wilderness issues still evoke controversy. Questions about the directionality of environmental change shed light on the conflicts between planning, political and ecological time frames. In this sense, Michelotti Park shows that there is a process of perpetual and unpredictable, social and spatial change that challenges the brown/green antinomy, as a prevailing construction of urban development and traditional patterns of metropolitan change. A green space is not only hybrid concerning the types of green space contained by its form, but also concerning the patterns of socio-environmental change, and the more-than-human temporalities that it can embody.



FIGURE 3.1 – A topographic exploration of Michelotti Park (Source: Barchetta 2019)



LEGEND

- 1 Giò Park
- 2 Old zoo area
- 3 All the old zoo buildings are marked in orange
- 4 Bocce games (S.I.S bocciolina)
- 5 The "little beach"
- 6 Car parking
- 7 Playground dismantled in 2018
- 8 Giò Park's gates
- 9 Old gates, still closed are marked in yellow
- 10 All the direct access point from the bicycle lane that is located alongside Corso Casale are marked in red
- 11 Municipal library "Alberto Geisser"
- 12 Corso Casale
- 13 Murazzi Waterfront Area
- 14 Café/Pub



FIGURE 3.2- A Walk inside the old zoo (Source: Barchetta 2017)



FIGURE 3.3 – The stonewall surrounding the old zoo (Source: Barchetta 2017)



FIGURE 3.4 – From the left to the right, the pursuit for pets along the bank of the Murazzi Waterfront (Source: Barchetta 2018) and the central promenade of Michelotti Park (Source: Barchetta 2017)



FIGURE 3.5 – Old zoo buildings (Source: Barchetta 2017)



FIGURE 3.6 – From left to the right, the “little beach” (Source: Barchetta 2017) and the path alongside the Po River (Source: Barchetta 2018)



FIGURE 3.7 – Giò Park's gate after and before the park's renovation (Source: Barchetta 2018, 2017)

CHAPTER 4

SCRAPS AND STORIES FROM THE EDGES OF THE STURA

INTRODUCTION TO AN ARCHEOLOGY OF ENVIRONMENTAL CHANGE

The area around the Stura River is located at the north-eastern periphery of Turin.⁴¹ The basin was, originally, a huge field of wheat, meadow and swamp lands that functioned as a zone of transition between the city and its fringes. From the eighteenth to the late nineteenth century, the Stura Port near the Victor Amadeus Bridge was a junction point, where many ships arrived and stopped. Each year, on 25 April (Liberation day in Italy), the commemoration in front of the monument dedicated to a local partisan recalls the tragic memory of the Stura's edges as a place of resistance and death; during World War II, German soldiers kept an outpost here, and many patriots were killed in the fight. The ruins of a tower are still visible, and recall the time when the area was a sand extraction site. During the twentieth century, many factories were established here. The river was used as a source of energy and as a place to dump waste. In addition, large subsidised housing estates were progressively built for the development of the Fordist city, especially for factory workers living in the adjoining neighbourhoods (Adorni et al. 2017; Garda et al. 2015; Di Biagi 2008). Over the years, the area hosted the municipal waste dump, the municipal animal shelter and three authorised settlements for Roma people. Other non-authorised activities slowly developed: illegal scrapyards; illegal dumping; improvised vegetable gardens; drug markets; sex workers; unauthorised Roma settlements.

Gradually, the territory of the Stura was exposed to multiple stigmatisation processes, which evoked feelings of confusion and insecurity. Drug markets concentrated in the area, as a result of the security measures employed to control the historic centre of the city during the 2006 Winter Olympic Games. Indeed, the park, later known as 'Toxic Park', became one of the major sites of drug trafficking in northern Italy. The proposal to build a golf course, in order to clear out and start

⁴¹ The territory of the Stura stretches for about 69 km, from the Lanzo Valley to La Mandria Park and the royal residence of Venaria Reale (UNESCO site since 1997). It reaches the city of Turin at its confluence with the Po River, near the border with Settimo Torinese, in its final stretch.

a rehabilitation programme on the right bank, quaked. In 2009, the area was at the centre of an ecological restoration project that operated as a response, respectively, to the fragmented legacies of urban industrialism and the decay of local ecologies. Project planning tools had identified the territory of the Stura River basin as a primary environmental and ecological resource of great value. Indeed, over the last two decades many territorial and conservation plans have overlapped. In the city Master Plan (updated in 2014), the edges of the Stura River are represented as half-empty spaces destined to become part of a river park. The site is expected to be developed under the name 'Stura Park', and will encompass a network of open spaces connecting different neighbourhoods, such as Rebaudengo, Regio Parco, Pietra Alta, Barca and Barriera di Milano. Indeed, as part of the Turin City of Waters' programmed interventions, Arrivore Park (this is how one section of the park is called) was inaugurated, and municipal vegetable gardens were allocated to urban gardeners. This put an end to makeshift vegetable gardens that Italian migrants and factory workers had started cultivating 40 years before. However, a number of improvised allotments still exist in isolated areas. In addition, a bicycle path was constructed along the 'Lungo Stura Lazio'.

The Stura basin is also part of a Strategic Plan: the Corona Verde project. The area has been internationally identified, in fact, as a Special Protection Area, thus becoming part of a network of protected sites across the EU (Natura 2000), as well as of the Po Regional Preserve. Near the confluence between the Stura and Po rivers, an island arising in the middle of the river, called Isolone di Bertolla, hosts one of the biggest heronries in Europe; together with the Natural Preserve of Meisino Park, it constitutes one of the most important naturalistic attractions within the city. Over time, the post-industrial riverbanks have witnessed a proliferation of transformations, bringing to light the fact that political, human and non-human temporalities are entangled, not necessarily in a stable equilibrium but in conflicting ways. Today, this large open space remains a highly mixed zone, where formal park areas, informal greenery, urban allotment gardens and neglected spaces sit next to each other. The 20-year site redevelopment project has not yet been completed. The unfinished restoration programme seems to have emphasised the social and ecological, internal fragmentation of the park. In addition, inefficient management has exacerbated the negative image of the park; as a consequence, fear of crime in a mismanaged natural environment and suspicion of environmental change have resulted in the silent permanence of this public space.

THE GARDEN ‘PLOTS’ OF STURA PARK

Clara stands at the side of the gravel track that was built, in 2009, along the left bank of the Stura River. Rows of young maples and willows on each side of the 3 km track are the palpable marks of a physical intervention. The inauguration of Arrivore Park, in 2010, represented one of the gateways to the recovery and cleaning up of peripheral riverbank spaces. Two bridges interrupt the trail and set the limits of a huge open space, where cultivated vegetation and spontaneous riparian woods conflate. Clara (WI) is 59 years old and lives in the Barca area, a neighbourhood located on the edge of the city, in the north-eastern periphery of Turin, near the confluence of the Stura and Po rivers. As we walk along the river, she recalls her parents always forbidding her to hang out near the Stura area, which she remembers as being an inaccessible heap of thorny plants and weeds, with the remains of a sand extraction site arising along the riverbanks. Manuela (WI), 55 years old, has joined us on the walk. Samples of pokeweed (*Phytolacca Americana*), dubbed a “pest species” by the river park’s gardeners, hamper her steps as she rapidly moves towards the flowers of *Robinia Pseudoacacia*, a tree commonly known as the “invasive” (because of its rapid growth), dead black locust. Expansive wild woodlands at the Stura are dominated by the North American black locust. This species had been used since post-World War II to recultivate bombed sites. Unexpected encounters with cobs and tomato plants remind us of once cultivated lands, which carried the seeds of Turin’s “car empire” (Grandin 2013) – constructed on former areas of subsistence farming – into the present. Suddenly, as she loses the perception of contact with the ground, Manuela looks down and spots an unexpected group of puffballs (*vescia* in Italian). It reminds her of her uncle, who used to harvest them there, although nobody in his family would eat them because they came from a toxic area. The women’s memories speak of the edges of the Stura as a political project of ruination, where territorial stigmatisation, industrial pollution, negligence and administrative mismanagement have imprinted the forms of a socio-spatial marginality, and sedimented the common perception of a toxic, no-go area. Nevertheless, as the film *City Veins* suggests, the Stura edges are less an urban void than a “crossroads of stories”.

In the early morning, the view is completely covered by a blanket of fog, smoke and humidity. Everything is grey. Above the bridge there is traffic, which leads in and out of the city. Below are the waters of the Stura that, after a few meters, mix with those of The River: the Po. Then an old tower, a beach, which looks like a lighthouse in the middle of a sea of land and shrubs. It seems as if there is nothing and no one, just an abandoned land. But there is life.

The retired *meridionali*, through planting, intersect with migrants and refugees. Ever since the 1990s, they have been building their shacks in the woods, which are characterised by rushes, alders and poplars. Plots of terrain have a story to tell, about the way humanising gestures – in a moment of change – mingle with the subjective, biophysical, socio-ecological and politico-legal aspects of terrain. The

basin of the Stura is a peculiar, hybrid space, part public and part private. The plurality of owners shape, even if not exclusively, many questions related to the access to urban space and the spatial patterns of the variety of green space. Piero (WI), 68 years old, lives in a two-floor house located near Stura Park's north side. I first met him on a cold and sunny morning of February 2017, during one of my first site visits, while I was walking a straight path with linden and plane trees adjoining a large lawn (a *pratone*, as it is called by locals) on one side, and the riverbank on the other. I stopped in the middle of the path to read a few handmade posters hanging from the tree trunks, warning visitors not to leave litter on the lawn. A few minutes went by, and then Dario (WI) called me. Sticks in his hands, a common hiking accessory to assist the walker's pace, he introduced himself as a 'native' of the basins of the Stura.

My parents bought the terrain here in 1950...It was a naked and empty area, in the sense that there were only allotment gardens, cows grazing on the grass, farms and a few houses...There was only one large landowner and he owned almost the whole area around here... Urbanisation occurred, in a way, through the personal labour of craftsmen. People, especially workers employed in the adjoining areas, purchased terrains where they built their houses. These people made the street where I live, they helped each other a lot in order to finish the work, for instance through meal sharing.

Stura Park is all about the idea of a plot and its alternate and interwoven meanings, particularly after World War II, when gardeners began cultivating gardens by renting a plot to grow special vegetables, plants or herbs. These gardens were worked individually by migrants turned workers (*operai*), who moved from the country's South (especially Sicily, Calabria, Apulia and Sardinia) to work in the industrialised North. From the 1940s onwards, the southern émigrés began growing fruits and vegetables on acres of state-owned lands along the edge of the Stura, as an after-work activity that created a space of autonomy and economic livelihood. In this sense, the act of 'digging in' combined leisure and subsistence farming with the histories of economic growth and internal migration in the post-World War II period. Shacks built from recycled material are the remarkable architectural elements that populate these spontaneous vegetable gardens, where gardeners installed handcrafted water pipes and barriers, and built their temporary homes in order to store tools and protect themselves from the rain.

Progressively, a patchwork landscape of allotment gardens and scrapyards emerged, showing the surfaces of industrial riverbanks—the 'reddish-brown' of wrecked cars and the 'greyish-green' of garden plots. From the mid-1980s onwards, the lives of many Roma people have intersected with those of the gardeners who cultivated informal vegetable gardens for many years.⁴² The absence of a coherent, political

⁴² The basins of the Stura host two illegal Roma settlements, both located on the left bank of the Stura River (Lungo Stura and Germagnano), and two authorised settlements (Aereoporto and Le Rose). Whereas Le Rose – which comprises Roma Sinti coming from the surrounding Piedmont Region – exists ever since the 1950s, and was authorised in 1991, the institutional camp of the Arrivore was created in the mid-1980s, as an emergency structure, and dismantled in 2004 (Rosa 2015, 2016). Roma migrants first arrived in Turin as asylum seekers in the 1990s, during the Yugoslav Wars, but the main inflows occurred during the second half of the 2000s, particularly after 2007, when Romania joined the EU. The Council of Europe estimates that there are approximately 140,000 Roma living in Italy (0.23 per cent of

action plan developed by public authorities has exacerbated housing problems, poor health and safety conditions, as well as the spatial segregation of the Romas (and other migrants) on the riverbanks, where parking, camping, tents and shacks are not allowed due to the flood risk. Over time, the riverscape of the Stura has become the site of the territorialisation of “Roma exceptionalism” (Maestri 2016) in public and political discourses, and also the terrain of competing claims to a landscape that has increasingly functioned as a form of segregated wasteland inhabitation, subject to conflicting demands regarding property that involve Romas and gardeners in particular. The creation of Arrivore Park reflected a celebration of urban allotment gardens, informal first, then recognised and managed by the local government, as ‘instruments to control’ and clean up a former misused place.

Arrivore Park has a total surface of 580,000 hectares, and is located on the right bank of the Stura. The area is a continuation of Confluence Park, and includes a wooden play area for children, a play area for dogs, a lake and an enclosed zone for the municipal allotment gardens. Locals remember the bulldozers dismantling the shacks of many Romas and gardeners. This image fills – with force – a significant gap in the scattered memory of the place before the 1990s. Only few interlocutors remember, in fact, what Arrivore Park was like before the arrival of the *nomadi* (‘travellers’, in English), which is how the Roma population is called in Italian; the way they express this ‘spatial amnesia’ often condenses into words that paint a chaotic, hazy and confused landscape (e.g. “I don’t remember this part very well” or “I have very confused memories of that part”).

It was an early morning of September 2017.

While riding on a bicycle the path that passes through the park, the sound of the water flowing in the river, as well as that of the vegetation, gradually abate the noise of the city. The speed provides a slideshow of the changing landscape, and from the corner of my eye I can see heaps of common tansy (*Tanacetum Vulgare*). A twist in the road seems to take me far from the direction I have come from, to the point that I almost feel lost, but the view of the ruined tower helps me regain my breath and turn towards the allotment gardens of Arrivore Park.

Antonio (IC), 79 years old, stands at the main door to welcome me. After I drop off my bicycle we walk down the path to his garden. One can only enter the urban gardens of the Arrivore with a key. Maintenance is performed by men, but municipal gardens are also enjoyed by a few women (usually gardeners’ wives).⁴³ Each plot has a tiny hut where to store tools, cans, gloves, boots and storage bags. Antonio grows beans in the lower part of the chain-link fence that separates his garden from the others, careful that the grapevine on the upper part doesn’t grow too high.

the population). The cities of Rome and Turin host the most alarming examples of discrimination and stigmatisation policies against the Roma (European Union Agency for Fundamental Rights 2012).

⁴³ Age and income are the main criteria through which gardeners are entitled to cultivate a plot. For this reason, the majority of the gardeners here are retired and low-income, elderly adults. The space can be enjoyed only by registered gardeners and their relatives, and comprises 150 individual gardens and a common area. Behaviour-related rules, which are established by the Municipality, affect the whole area (both collective and private lots). Among other things, these rules concern the use of space, for example for barbecues and growing food; water use; trees’ maximum heights; fences; building materials; site maintenance; the weeding of surrounding spaces.

I was part of the first group of horticulturalists allowed to cultivate vegetable allotment gardens. I knew this place because some friends of mine grew vegetables there (his fingers point to the hill). Municipal vegetable gardens were established after the dismantlement of the scrapyards and of the Roma settlement. The Municipality rented out each parcel, but, since it was the very beginning, it was our duty to remove mounds of rocks and rubbish from the plot. It was a daunting job! While digging, I found all types of waste: dishes, knives, pieces of tires, copper. It still happens today.

The allotment gardens of the 'Lungo Stura Lazio' all look very different from one another, above all in the different nuances of formal and informal accessibility that characterise the gardens, and their edges. The Lungo Stura is privately owned. In order to implement the Master Plan for the cleaning up and restoration of the riverbank, Turin's Municipality had to obtain the land through a procedure of expropriation for public benefits, which was squared by a money repayment to landowners (Rosa 2016, 192). In 2011, the construction of a bicycle path represented a preliminary step of the Master Plan, which included the expropriation plan. However, the Jersey barrier that nowadays separates the cycling lane from the riverbank is the "symbol of defeat", as a member of the Metropolitan Council said (SI05). He added: "We haven't been able to put that riverbank back in order, and the spontaneous vegetation, both native and invasive, is taking over as if the human race has become extinct". His words suggest a non-human agency in processes of marginalisation and ecological blight. In this context, the matter of green blight thus reveals a causal relationship between socio-racial disparities and overgrowth, which confirms how "leaving nature alone means keeping injustice and poverty unchanged" (Gandy 2014, 2).

At the 'Lungo Stura', a narrative exists of the plot as a "polemic landscape" (McKay 2011, 2), which shows how notions of social conflict, marginalisation and environmental degradation are in fact linked and mobilised via the practice of gardening. In 2004, gardeners started a lawsuit against the Municipality, which was planning the dismantlement of the shacks – including those of the Roma settlement – as a necessary step towards the transformation of the area. *I ricordi del fiume* (2015), a film shot in the Lungo Stura settlement, nicknamed El Platz by its inhabitants, narrates the lives of its inhabitants a few days before the demolition of the camp in February 2015. The demolition of 60 shacks, in February 2015, was the first step towards rehabilitation, which was accompanied by the entitlement of a property right to the gardeners that became the owners of the plots. I met Luigi (IC), 65 years old, in front of the Iveco gate, where a pedestrian crossing helps pass the trafficked road. Near the parking lot of the Iveco workers, we step out onto an unpaved road and then turn right. A muddle of condoms and trash cover the path, and I keep my eyes on the ground. Suddenly a soured smell draws my attention to a mulberry tree, whose branches almost form a natural arch. A maze of narrow paths unfolds, and it isn't clear where the allotments end and the Roma settlement start. Luigi says, "do...not...go...there", with breathless pauses between each word. The 'Lungo Stura' is a rather open access space. Here, men have transformed plots to cultivate homeland vegetables and plants, and to organise family parties on weekends. Sometimes, the similarities between garden plots and the gardens of single-family units are startling.

Fabiano (IC), Luigi's friend and allotment neighbour, has just put a house number on the metal sheet that makes up the roof and wall of his shack. As he stands near the door to welcome us, he takes off his glove and prepares to shake my hand. Fabiano always complains that anyone could enter and roam inside, and has reported cases of the handmade sign, which marks the private property at the main entrance, repeatedly being destroyed at night. They had put up the sign even before winning a lawsuit. Furthermore, the acts of restraining decay – in order to prevent “travellers from occupying gardens”, Fabiano says – by taking care of abandoned plots, make visible the peculiar forms that gardeners' ties can take. Abandonment occurs, particularly, when allotment neighbours grow old and are no longer able to cultivate their gardens. In this sense, the maintenance of gardens materialises a property claim, which helps gardeners transform a problem (the abandoned plot) into an asset for tackling social and territorial conflict dynamics.

RIPARIAN INTERSTICES

When walking alongside the chain-link fence that separates the gravel path from the edge of the river, you can catch a glimpse of what remains of the allotment gardens, which are no longer there. Plastic and wooden boards resist to the force of water, and emerge from the bushes of plants and plastic bags. If it were not for Luigi and Fabiano, I would describe it as an undistinguished mound of waste left from the passage of water and time. As I stick my hands through the hole in the fence, we watch the other side, where an improvised volleyball net hangs beside a hut that hosts four migrants from Pakistan. The shack remains invisible when we walk along the path on the other side, as a wall of reeds hides the slopes descending towards the river's edge. The lives of migrants, urban gardeners and ordinary park-goers that I have narrated so far highlight the agency of other-than-human forces in the transformation of the landscape of the Stura, even if these forces are transformed for human purposes. The enforced isolation of Roma settlements – illegal and official alike – along the river edges; the cultivation of gardens for the retired *meridionali*, which solidify into a 'garden suburb' at the periphery of the city; the distancing of refugees and other migrants who live in marginal conditions—all this speaks of surfaces as records of the fragility of life. It also shows, though, that the disruption of usage, for example by clearing other people's traces, and the creation of a shelter may sometimes refer to the same action.

The hydrology of the Stura not only marks a socio-ecological boundary, where to find a different kind of urbanity, as others have already pinpointed (Spinelli 2013). Water, through its liquid, connects micro-worlds of rot and decay, forms of controlled 'edgeland inhabitation' that interlink human exclusion with disturbed

environments, negation of citizenship and assertions of property. In this way, the movement of water makes visible the endless process of breakdown, circulation and re-emergence, during the transition to a putative new environmental condition. Changes in the water flow allow humans and nonhumans, and their material entanglements, to constitute particular atmospheres of risk and uncertainty in a moment of environmental change. “St Levee” (*Sant’Argine*) is the way in which 66-year-old Mara (WI), a long-life visitor of Stura Park, refers to the role that embankments play in the protection of locals from floods. River embankments were built after World War II, by local influential landowners who implemented engineering works that put an end to disastrous inundations. “I come here often. I love to look at plants and step into this tiny space between land and water. It occurs even during severe storms; I look at the water level hoping Sant’Argine will save us!” she says laughing, simulating a worried look while standing, arms folded, by the side of the path. The embankments are mainly composed of concrete wall, but they are barely visible from the path that adjoins them, as shrubs, ivy and trash left in the open air cover them.

Embankments never appear as distinctly as they do near the Ferdinando di Savoia Bridge. The bridge is built on a bed of gravel, shrubs and trunks surrounding the piles. This is one of the ‘Stura beaches’, a strip of land running parallel to the bridge, where during springs and summers people stop to take a bath, wash clothes or simply sit on the gravel, with the water caressing their bodies as it passes by. This interstitial space, made of land and water, recounts the memories of the beaches that are no longer there, where people used to go swimming and fishing in the 1950s and 1960s. On a warm afternoon in late May 2018, Melissa (WI), Simone (Melissa’s husband, WI) and I were walking along the straight track when we saw a common elder (*Sambucus Nigra*) standing on the slope that adjoins the river. Redeeming and evil powers are associated with this plant, which can easily be found in hedgerows and on waste grounds near waterways. Looking for plants can encourage one to stop and step into the past, to gather personal memories of the place. Simone says: “I remember that there was a beach nearby. As my father and I cycled through the city, we saw...so...so many building construction sites on the way to the Stura. He loved so much to bring me to this place, where families and children gathered”. Melissa and Simone have lived in the Barca neighbourhood for ten years. Historically, the area is also known as ‘the village of washerwomen’ (*Borgo delle lavandaie*); during the first half of the twentieth century, the river served for the washing of laundry, and the fields adjoining the banks were equipped with rows of drying racks.

When sand extraction operations started, fishing and swimming bans were imposed, especially next to the dredging site. The sand extraction site did not keep people from going to the Stura, and many recount the tragic memory of bathers dying in the river due to the presence of whirlpools. Death emerges as a medium that unites and solidifies the mysterious atmosphere, condensed in the words ‘strange vibe’, uttered by park-goers when they wander around the ruined tower. The loud noise of dredging activities is still vivid in the acoustic memory of long-standing residents.

“That...shuu...hah...I still can’t stand the sound of it”, says Tommaso (79 years old, WI), a long-time resident of the Barriera di Milano neighbourhood. Tommaso comes to the Stura to gather wild herbs and fruits (especially apples, figs and walnuts), which he uses to prepare homemade liquors.

By following the geography of water of Roma migrants, Elisabetta Rosa suggests, one arrives at the small green fountains, which represent an important resource for Roma people, and other migrants, as well as for homeless people (2016, 186). The fountain – with its characteristic bull head (the symbol of Turin) – spouts water and provides free access to water for drinking, and also for washing dishes and clothes. In 2012, the removal of the small fountain of the Barca neighbourhood – following complaints that Romas were using it – made visible the role of material objects as ‘triggers’ of blight, while simultaneously showing how an alleged misuse can become a matter of who may legitimately use it. The film *City Veins* describes how Roma migrants use water as a swimming pool during the summertime, with children playing and splashing around in the water. Occasionally, people also go fishing at the edges of the Stura. However, the conservation plans that regulate the area have led to the enforcement of fishing bans (Municipality of Turin 2018). Only when walking alongside the gravel river bed you can meet people, mostly men, wading while hiding in the bushes in order to find the best fishing spot, and making sure not to be seen. This image seems to stand in contrast with Dario’s (mentioned at the beginning of this chapter) memory of the riverbanks as a site of contention among children, to find the perfect stretch of water for fishing. Many even recall that a fishing lure factory was located near the river. Between the nineteenth and twentieth century, in fact, the neighbourhood was a popular site for Sunday trips and fish meals.

Riparian vegetation can also be one of the most ubiquitous ways of thinking about the life cycle of urban natures, especially in floodplain ecologies. Clara and I walk along the gravel track when we see a man in his 70s, disappearing into the dense vegetation on the slope that adjoins the river. As the man turns towards us, we realise that he is collecting reeds. The man looks at us suspiciously, and remains silent for a few seconds. The tension builds up, but slowly flows away as he waves at us, while he points at the reeds he is collecting for his vegetable garden. He puts down the reeds and starts recounting his memory of the park, when it was still a wetland. Then he returns to the present: “Look at these rushes, we are not in the Amazon jungle, the mayor doesn’t care about anything other than herself”, he adds bitterly. The Amazon jungle thus becomes a geographical metaphor for a bounded idea of pristine nature which, outside of its conventional site of fruition, becomes a marker of disorder. Hanging down his head, the man continues: “I just see all this *degrado*, and it makes me feel sad. At least I can use these reeds to fence my vegetable garden”.

On a sunny afternoon of early May 2018, I organised a collective walk with a small group of park-goers to reflect on novel forms of wildness that emerge on former

urban, industrial grounds.⁴⁴ Arianna (IC) is a 37-year-old environmental educator who, through urban botanical explorations, experiments with the potentials of an imaginative reinterpretation of the urban space as a spontaneous place of *counter-vegetal politics* (Head et al. 2014). We stop and pause, while we look at a lush pile of sweet wormwood (*Artemisia Annuua*) adjoining the gravel track. These “saboteurs of order”, as Arianna describes this annual plant, through the scent of their leaves and vast distribution show a different green space, thus disrupting normative aesthetic conventions. When looking at the ways in which white bryony (*Bryonia Alba*), honeysuckles (*Lonicera Japonica*), tree lupin (*Lupinus Arborens*) and mock strawberries (*Duchesnea Indica*) expand and radiate across space, or even “roam”, according to the French gardener, botanist and writer Gilles Clément (2002), it seems that the sensual experience actuated by walking – more than showing the potential of healing (toxic) bodies and places through wilderness – shifts the baselines and determines the extent of change by suspending one’s anthropocentric judgements. In doing so, it rethinks anthropogenic interventions in urban environments, and gains track of our attentiveness to and intimacy with places.

As my interlocutors step in the direction of some lady’s thumbs (*Persicaria Maculosa*) and yellow mignonettes (*Reseda Lutea*), taking the time to stop, observe and touch, they don’t simply explore the material vitality of what would otherwise be disposed of; they also tell alternative stories that urge reflection on the messiness of social realities, without over reducing ruination “to an all-too-human by-product in need of rational management” (Reno 2015). “Everything gets knotty here!” 61-year-old Fabrizio (WI) utters, while he moves towards the thick vegetation that brings us to the river’s edge. Fabrizio (husband of Clara, mentioned at the beginning of this chapter) notices that they have never left the main path during their Sunday walks at the Stura edges. Crafting new paths therefore not only liberates the body from the performative constraints of the city, but it also provides a way of venturing the possibilities of life processes and creating entanglements without losing the complexity of histories. Arianna, Daniele, Fabrizio and I end the walk by roaming the dried-up riversides, where we find a car buried near a sample of *Verbascum Thapsus*, known as the great mullein. Daniele is a 45-year-old agronomist, very passionate about learning how plants can help connect fragments of stories to socio-ecological transformations. After foraging information in his plant identification notebook, he recalls how people used to extract a juice from the seeds of the plant, which they next poured into the water in order to poison fish and thus catch them more easily. We found ourselves surrounding this plant and wondering to what extent these ‘toxic residues’, captured both in their physical presence and absence, might tell alternative stories about this place simply by walking along the riverbank. As a group we have come to acknowledge the importance of less eventful and visible traces; these may challenge the reconfiguration of people as victims of ruination, while highlighting the potentials of sensory experience in the creation of alternative

⁴⁴ This was the only guided botanical walk that I organised during my research fieldwork. Participants included park-goers and residents I had already interviewed, and also involved an agronomist, a filmmaker and an environmental educator.

articulations of nature-people alliances.

FEARS OF NATURE

It was a humid night in late September 2017, shortly before midnight.

As soon as Andrea, Antonella and I move close to the ruined building of the former sand extraction site, we can hear the cricket chirping, dominating the whoosh of cars that speed over the asphalt. Andrea gives me a soft kick with the heel of his shoe, and I slow down my pace. I turn my head to see the luminescent trees and bushes on the edge of Arrivore Park. Wildlife seems to be everywhere, the crickets respond to other night predators, and the park becomes familiar as we encourage each other to go on for two or three more steps. A gentle breeze blows in the opposite direction of the river flow. I feel the wind caress my face. We walk side by side, the flashlight of the phone is on, but it is not enough to enlighten the path. We laugh nervously; then we stay in silence, listening to our squeaking shoes. The sky is studded with stars but it is becoming darker and darker as we proceed into the wood. “Perhaps it is enough for tonight?” Antonella asks half laughing, half worried. We decide to return the way we came.

I have never gone for a walk alone at night. I have always been vigilant and attentive to what happens even during the day (e.g. the sudden view of a person jumping out from the shrubs, noises that I can't make out what they are, the panoramic views of a deserted space), and attentive to the ambiguous emotions coming out as mixed messages of fear, wonderful surprise and paranoia inside me. The park is huge and isolated, services are few and far between; for this reason, silence and solitude often become an integral part of ethnography, not only during the night. By going to the edges of the Stura at night, to see what is actually happening and how the space is being used, I had the opportunity to understand how the ‘sense of presence’ and ‘no presence’ shifts from day- to night-time, and from one night to another. In these instances, research informants expressed their concern that something bad or unpleasant could happen to me, that a night-time walk in the park could turn into a nightmare: a walk into danger and crime. Muddles of condoms and ashes remaining from a fire are often considered evidence of the night as a transgressive landscape.

Giovanni, 60 years old, lives in via Botticelli, a former public housing area near Arrivore Park. “I don't come here at night, by myself. From my window, I see anything goes on around here...fires lighting up in the night...you-you know...all these people”, he says rolling his eye scornfully, his upper lip raised on one side. Stigma seems to produce ‘black holes’ in the perceptive experience and memory of the open space, showing how territorial stigma can disperse beyond ‘the point-in-time’ of specific events and produce disruption; simultaneously, it enhances the social antagonism and the racialisation of the poor, which emanate from the

putative place's condition of existence. Particularly, its representation as a 'no go area' and seemingly empty, where emptiness becomes a problematic form of disorder, is epitomised in the sentence "exactly because there isn't anything that can't happen". Dog walkers are a great way to meet and have conversations about the different atmospheres of sociality that can form at the park. They only go to the fenced dog park of Arrivore Park, which is the biggest in the area and very popular among local residents. The dog park is often used as only one of the stops on the way to other localities. Many even have a padlock to secure the gate when they are inside. Thus, the first time I met dog walkers, I asked if I was allowed to enter inside, and a young lady came to open the gate. Francesca (29 years old, WI) parks her car in the nearby parking space, and uses the dog park every day. On a freezing early morning of December 2017, we are in the front lawn sitting area. Fabiana, always careful to keep an eye on Frida, her labrador dog, repeatedly complains about cold hands and feet. We feel we are pretty much alone in the park, and while looking around Francesca says:

It might be better for you not to come here after 9 p.m.; there is not sufficient light to take a peaceful walk. There is no public lighting within the dog park. With unmown lawns and scarce light it's impossible to use it. You don't know where to put your feet! There can be broken glass, needles, a-n-y-t-h-i-n-g. During the winter season, we...dog walkers...leave around 6 p.m., because then...you-you know...The park becomes a no man's land. There is a sort of curfew. Shops are all closed. Romas have even removed electric cables from the lamps in the north side of the park. There is a grove of elm and willow trees over there, which is totally dark. I don't want to imagine what happens there!

The scant provision of public lighting is rightly the subject of a common concern among park-goers and local residents, who feel that the place is *wasted* because you can't walk at night due to the lack of light. In this sense, 'waste' in the verb form stands for using a place insufficiently. My informants not only express their regret about the conditions of Stura Park, but they also wish rehabilitation happened differently, and when they do so they also discover that Stura Park is different from more traditional green spaces. Marina (55 years old, WI) has lived nearby ever since she was a child. She tells me that the park was a secret place, a blank spot in her memory. Walking, then, becomes a way of realising what, in a way, she has lost. This is not a traditional park, it's frightening and exciting. It makes for a more spontaneous experience of nature. This is not a designed landscape, it's not Valentine Park, but it is definitely more human than other open spaces. Her words have resonance with Mara (mentioned at the beginning of this chapter). Her pace is slow and cautious, and with her eyes directed somewhere at her feet she says: "This place...ma-makes me feel like...raaaaa! It gives me energy and animosity".

Animosity identifies, as Brighenti and Pavoni (2017) suggest, a personal and intersubjective feeling, even an ecological phenomenon, entangling the haptic experience of the place and the participants' experience of environmental change. Animosity is a form of tension, both positive and negative, that increases the capacity to feel and act – even at the price of challenging the body – through continuous negotiation and exposure. Through its mere existence and 'in-between nature', Stura Park contests traditional notions of culture and nature. It is not a

traditional urban park; it is wild, uncertain and unpredictable. Yet, it also proves to be evidently anthropogenic, unkempt and deteriorated. Uncertainty arises from attempts to understand Stura Park as part of the socio-natural world. By exploring the frictions existing between the idea of the Stura edges as a burden and, simultaneously, as a resource for its novel ecosystems, I had the opportunity to observe how animal life is taken into account. I could thus bring to the foreground what the urbanisation of a non-human world entails, as ‘wild’ animals make their appearance in urban space. For instance, accounts of the presence of free-living dogs are often used as a way to persuade people not to visit Stura Park at night, by establishing a causal relationship between the park’s supposed disorderliness and the presence of “dogs attacking people”.

Human practices direct animal life in cities in many ways. Sometimes they segregate animals concretely and symbolically, restricting them to ‘beastly places’ (Philo and Wilbert 2000), or they create special reserves for wildlife and biodiversity. In other instances, as Krithika Srinivasan (2019) suggests, free-living dogs are kept in a liminal condition. They survive in part on food given by people. Other park-goers frightened or annoyed by them will throw stones. The condition of “not being natural enough” (Srinivasan 2019, 12) highlights that coexistence with unplanned natures (both free-living animals and non-traditional parks) always goes with conflict. Local ideas and contrapositions between free-living dogs (not enough natural) and grey herons (pure natural, wild) confirm the ambivalent role played by animals in the conceptualisation of what constitutes wilderness in highly urbanised environments. There always exists ambivalence about the enthusiasm for wilderness on the one hand, and attitudes towards cleanliness and civic beauty that consider the appearance of certain animals as unacceptable, on the other. Beliefs about natural and social worlds reflect each other, and are active agents in urban ecology, showing that people’s ideas about free-living dogs as markers of decline, or pests, or “co-residents of a shifting socio-natural landscape, ...affect directly policies, practices, and by extension, the physical environments themselves. [...] Think, for example, of the conceptualisation of weeds and wild dogs, squatters, drug users and dealers as a toxic infestation” (Draus and Roddy 2018, 3-6).

When the ‘Tossic Park’ (as Stura Park later became known) is evoked, residents recall the violent citizen patrols and sting operations put in place – especially during the night – to clear the ‘drug-infested’ area of Stura Park, when discarded needles and drug paraphernalia were pervasive throughout the terrain of the park. Between 2006 and 2008, Stura Park was in fact one of the major sites of drug consumption and drug trafficking in northern Italy, and was splashed in local and national newspapers. In the context of Turin, all types of injection sites have arisen across the city. One example is the unsanctioned, supervised injection facility run by drug users within the area of Collegno (called *Stanzetta*, which translates as small room). This self-managed facility was located, spontaneously, in an abandoned building situated in a park, once part of the mental asylum of Collegno. It had long been used for drug consumption, with the consequent unsafe discarding of syringes, vials, toilet paper, dirty tissues and so on (Bergamo et al. 2018). Other examples include

supervised drop-in centres and street services, such as the disused bus transformed into a safe 'injection room', located alongside Corso Giulio Cesare at the intersection of the Dora River, another riverside area long used as an unsupervised injection site. None of these experiences has ever achieved the same visibility and importance as the Tossic Park of the Stura. Ten years ago, drug markets concentrated in the area of the Stura, also because of its proximity to the Turin-Milan motorway.

The word 'heavy' best describes the 'tossic' atmosphere of that period, which cast a shadow on Stura Park, putting 'in a bad light' the nearby neighbourhood. Local residents recall how the adjoining spaces became increasingly 'drug infested'; "drug users were everywhere, like larvae, on the streets, on public transport, at the riverbank", a man says holding a glass of water in a bar located near Arrivore Park. They even occupied the stairs of entrance halls to blocks of flats adjoining the park. For this reason, some residents installed iron fences to prevent drug consumers from accessing the stairs of the buildings. Stura Park, through its woods, clumps of trees, shrubs and meadows, provided an environment where to buy and use drugs 'in the light' but without being seen, because it lies at the fringe of the city. However, drug use in visible spaces heightened the residents' mistrust and complaints. Local media were key players in the dissemination of moral panic, as well as in the process of arousing social concern and anxiety about Stura Park, with drug users being presented as a threat to public order. The initial absence of and tacit tolerance by law enforcement officers was transformed into a 'zero tolerance' politics, accompanied by grassroots mobilisation, violent citizen patrols and repressive sting operations often gone awry, as they caused many wounded and drowned victims, while drug users escaped by crossing the river. Today, a chain-link fence keeps the area confined from the thoroughfare named Corso Giulio Cesare, with partial gaps interrupting the fence when it is not completely broken, where one can easily slip through the holes. In the mall near the Novotel hotel, the City of Turin organised a set of cultural events. However, the organisation of these events, together with the start of rehabilitation initiatives, simply moved drug users and dealers a few meters further. One day Dario and I were walking in the woods of willow and poplar trees when we see mounds of clothes, a luggage and a fossilised mattress covered by samples of lichwort (*Parietaria Officinalis*). Dario says: "Look! These are perhaps the remains of Tossic Park. This might be one of the places where the destitute used to find refuge". I remain silent and take pictures.

THE ATMOSPHERIC DIFFUSION OF TOXICITY AND DISCOMFORT

What do you wanna know? The river, the environment...a little bit of everything...*how it's going*

*here?*⁴⁵

Gerardo, a 70-year-old, life-long resident of the FIAT residential district (*le case Fiat* in Italian), asks me this question during a collective walk at the northern side of Stura Park, organised by the volunteers of a social centre.

It is very common to see sheep grazing the meadow across different areas of Stura Park (both on the north and south sides of the park). The city's search for urban shepherds followed a successful law amendment of April 2007, which saw the Municipality approve alternative land management tools such as flocks, to munch on vegetation, and especially weeds, in city parks. Urban grazing is particularly widespread in green spaces of the peri-urban fringe. The sheep munch at Confluence Park, Meisino, Colletta and Colonnetti, alternating about every month during spring and autumn. Animal-powered weed control has less of an impact on the natural environments than spraying herbicides does, especially if close to bodies of water. Not to mention the fact that it reduces green field maintenance costs (i.e. mowing, fertilisers, pesticides) and provides – through the sheep manure fertiliser – adequate nutrients for the soil. The by-law change was spurred by a successful two-year pilot project, which brought some two flocks (500 sheep each) to Stura Park, along with the shepherd Valentin, three dogs and a tiny caravan. Valentin, 50 years old, works at a farm located in the south-east of Turin, in the area of Pino Torinese. He is originally from Bacau, Romania; he arrived in Italy ten years ago, as a mechanic. He supplemented his income by working as a shepherd, which then became his full-time job. When he was a child, Valentin used to follow his father and grandfather at the foothills of the Carpathian Mountains, where he learned to manage livestock. During my ethnographic visits to Stura Park, it was difficult to overcome communication difficulties because Valentin doesn't speak Italian very well. However, regular encounters usually helped to start conversations about city shepherding and the specific skills that it requires.

Indeed, city shepherding also involves maintaining relationships with park-goers, both people passively contemplating these city ruminants while they walk, and those who connect with the sheep and dogs, and also with Valentin himself. "People stop and look", Valentin says, "but they also look at the sheep with disgust and complain about the manure smell, so I try to clean up the trails with my walking stick".

It was a sunny afternoon of mid-May 2017.

I take the side road and I make my way to the exit next to the old house adjoining Arrivore Park. While enjoying the panoramic view of the basin, I think back to winter. The first time I ever visited the park I was blown away by its vastness, and by how dry and wintry white the vegetation was. Suddenly, the white of sheep's wool brings me back to the present moment. While riding my bicycle, I had actually already noticed the pungent, acrid, sour smell of manure. Curious residents look at the sheep from the bus stop or from their balconies. A couple of men are sitting on the swing of the Arrivore playground. They are completely surrounded by hungry sheep. The shepherd is sitting on a wooden beam. I give him a wave. He waves back. Simultaneously, a lady approaches me and says with a timid smile: "Doesn't it smell like the countryside?"

⁴⁵ The literal translation of the original 'l'aria che tira' is: 'what the atmosphere is like'.

The sensuous urban encounters with seemingly out-of-place odours can also elicit the lurking and persistent human belief in beauty and wilderness, about what is habitually urban and what is habitually rural; this reinforces the dualism of any kind of marginal urban natures that is typical of Western environmental thought. On the one hand, its physical appearance is considered unacceptable; on the other hand, it can inspire romantic appreciation of a ‘tamed’ wildness, and of rural life. At the same time, these urban encounters can also imply breakdown and contamination, not just in the form of disgust. Grazing on a former brownfield site is a concern for some. Fifty-five-year-old Marianna lives near the north side of Stura Park, and walks the riverbank every day. She stands by the side of the path, looking suspiciously at sheep pasturing on the edge of the river and says, shaking her head, “because really, what can they eat here?! I don’t even know what is in the air we breathe here!” The edges of the Stura have always exposed the dark underbelly of the city, where environmental crime and victimisation, industrial prowess, racialisation of poverty and social deprivation mingled.

At the riverbank, the former automotive plant colonised peripheral spaces by establishing infrastructures, such as industrial landfills and scrapyards that served to regulate and sustain local industrial production. Commercial buildings and warehouses merged with residential districts, and industrial plants mainly concentrated in the north banks. The Iveco (Industrial Vehicles Corporation), with its parking lots and electric trellis, still occupies huge strips of land on the southern banks of the Stura. In addition, the municipal solid waste dump (Amiat) has considerably changed the riparian ecology, especially from the 1960s to the 1980s, when permeable landfill barriers caused the release of toxic constituents into the underlying aquifers and the nearby river. We must also consider the area named Basse di Stura, the city’s largest industrial landfill, where the cleaning up has not been completed yet. Contaminated lands have not been fully remediated; they have only been secured. The landscape of the Basse di Stura consists of patchwork woods (i.e. willows, poplars, walnuts, samples of butterfly bush and ragweed), quarry lakes, plains and ‘hills’ formed from the accumulation of industrial waste materials, primarily steel furnace slag. Each area has been called with the name of the former industrial plants and landfills that it used to host in the past.

Lungo Stura: 2 km of blaze and landfills. Here’s the poisoned land that besieges Turin⁴⁶

The socio-ecological sensitivity of this peripheral area is a long-standing problem that no administration has been able to solve completely. This in spite of the fact that, from the 1990s onwards, the rehabilitation of riverbanks has been a prominent concern of various planning and design initiatives, such as the Turin City of Waters project, Green Crown and P.E.R.A., the executive plan for the rehabilitation of Basse di Stura. Ever since the 1990s, the occupation of riverbanks by migrant populations coming from Eastern Europe represented a growing challenge to the temporality of depollution and remediation; it simultaneously exposed the uneven spaces and times

⁴⁶ Poletto L., *Lungo Stura: due chilometri di roghi e discariche, ecco la terra dei veleni che assedia Torino* (February 9 2017, La Stampa).

of long-lasting and even permanent waste, affecting bodies in differentiated ways and playing out across a range of temporal scales. Nowadays, while the persistent industrial pollutants may not trouble my interlocutors from this area too much, many express a moral discomfort with the presence of Roma people, and particularly with the toxic smokes caused by the Romas. They thus soften the emotional and ethical impact of the “slow violence” of industrial particulates and effluents (Lucas 2013, Nixon 2011). This is not to undermine the environmental harm to which local residents are exposed; it highlights how toxic air also becomes a device of exclusion, a cause of contention and a resource for the negotiation of land.

Toxic smokes released through the burning of tyres and cables distress the local residents of the adjoining neighbourhoods, who have set up grassroots organisations in order to express their fear of ‘toxic smokes’, and to warn others about health risks. “Can you smell it? They are lighting a fire now”, says Marianna while we walk down the path by the left bank of the river. “Tonight, at around 11 p.m., you won’t be able to open the window, let alone stand here”. She says that the smoke is dense, acrid and that the smell is overwhelming. Marianna has been living near northern Stura Park for 20 years, and only from 2010 onwards she began walking her dog in the open space, which she remembers as a barren land with bushes and stray cats. “The Roma are not to blame, but rather the public authorities that allow something like this to happen, and fail to punish it”, Marianna says bitterly. She believes that some members of the Roma settlements burn waste materials. They have been warning the local authorities, including the police, the Nucleo Nomadi (a special unit of the municipal police that was created in 1988, with the specific aim of monitoring and controlling ‘travellers’ through the city), the Municipality’s office for Travellers and Emergency Settlement, and the National Environmental Agency. “But toxic smokes continue”, Claudia says. Sixty-year-old Aldo, who has been fighting – alongside dozens of neighbours – to put an end to the burnings agrees. “Here we have no problems with the Roma minority, we have a problem with the state institutions that don’t do their job properly”, he says. Yet, not everyone agrees that ‘the Roma are not to blame’. Racist discourses contribute to create and sustain antagonistic practices against the Roma. This demonstrates that racialising practices, through the association of other bodies with pollution and toxicity, contribute to the reproduction of environmental degradation.

The difference between the acceptable and unacceptable, and how it is bred into senses and visual aesthetics, also concerns the practice of barbecuing, a favourite pastime among Eastern European immigrants. During spring and summer, family barbecues take place on strips of lawns across Stura Park and alongside the riverbank. One day, Elena and Constantin had just set up the cooler, the folding table and a couple of folding chairs when Chiara and Roberto approached the couple to tell them they were barbecuing in a non-barbecuing area, and reminded them to dispose the waste correctly after the barbecue. The park has, in fact, raised concerns on the litter front. Local media have depicted scenes of wild and drunk barbecuers polluting the park with trash and smoke, as in the case of the immigrants from Peru at Pellerina Park. In July 2017, the so-called ‘immigrant problem’ of city parks

involved a massive deployment of law enforcement at Pellerina. At Arrivore Park, on Sunday mornings you have to make sure to arrive early in order to get the perfect spot; the lawns are huge, but there are few trees, and there is little or no shade during the daytime. Some stay near the edge of the river, where woody plants create a sense of isolation. However, when riding one's bicycle one can hear barbecue sounds, whispers and laughs.

More than 23,000 Romanians live in Turin (Municipality of Turin 2017), and barbecues certainly represent a key family moment during which people try to bridge gaps and frictions that migration creates. People attach extension tables to the picnic tables furnished in the park; balloons are pinned to trees; echoes of Romanian pop music are in the air. Park-goers passing by seem to be focused on going in the right direction, when they suddenly direct their glance at the family parties: some smile, others raise their eyebrows. The bodies of immigrants and their environments, as well as the smoke, meat and litter they supposedly produce, invoke unexpected moral dimensions even when sight is not involved. As the anthropologist Bettina Stoetzer writes, "migrants become almost animal-like, in need of containment. These tropes of wilderness are more than metaphorical; they inform public policies such as EU-based integration projects that attempt to undo racial segregation, poverty and urban decay" (2018, 306). But, as Gerardo (mentioned at the beginning of this section) says, "it is not the migrant ruining the place by leaving the garbage behind, it's the bins that are undersized, under-maintained and too few in numbers. God only knows what I did to get some baskets here!" Gerardo's words highlight the fact that inadequate and poor maintenance, not only carelessness, is an important issue in the park, where the decentralisation and privatisation of maintenance operations have slowed down the litter picking system by exacerbating public concerns on the litter front.

AGITATED TOGETHERNESS, SHARED UNCERTAINTY

The particular reconfiguration of the edges of the Stura presents both familiar and unique stories of the intersection between urban change and the everyday life of public open spaces. The change from an agricultural zone of transition to an organic machinery, and from an industrial wasteland to an interstitial form of nature, where geographies of abandonment and (spontaneous and cultivated) nature conflate, is not a simple path, as if it were a linear trajectory from a 'brown field' to a 'green field' and vice versa. It is, indeed, a process of unpredictable socio-ecological change that provides a challenge to the antinomy between waste spaces of neglect and abandonment, and green spaces of ecological and aesthetic value. The social and environmental implications of economic reorganisation, failure of public policy,

political impotence, increasing racial hostility and social conflict have reproduced the social and environmental fragmentations of the industrial past, and sustained ecological degradation and displacement of marginal bodies, both human and non-human, in the present. However, the socio-ecological fragmentation of the edges of the Stura doesn't correspond with a mere sum of historical events. As I have shown, it is important to start narrating the stories of this process by observing the active relationships between bodies and environments, stretching across multiple pasts, futures and presents.

At the edges of the Stura, in fact, there are multiple trajectories of degradation, which show that the temporalities of toxicity, depollution and everyday life are made and remade through non-linear accounts of time, in ways that complicate or contradict each other. In this perspective, the process of becoming designated as areas of *degrado*, in public discourse and everyday speech, necessitates analytical attention as much as the condition of *degrado* itself does. *Degrado* does not merely describe a physical condition on the ground. It is a way to organise what and who has to be lost or excluded, and how temporality influences this decision. Contrary to what studies say regarding the relationship between discourses of blight and urban renewal, rhetorics of *degrado* are not deployed necessarily to justify environmental rehabilitation projects. They are also a means of fixing bodies as the objects of negative feelings. In this sense, social conflict is produced in part through the inherited socio-ecological fragmentation of the environment, and the spatial marginalisation of particular subjectivities; and in part through conflicts over the way in which the temporality of environmental change in urban natures is understood, lived and felt. Social conflicts take shape in the lived experience of the biological material and the intensifications of feeling; the elusive entities of soil, water, air and feelings are crucial to the formation of borders, which are normalised and naturalised via the embodied histories of racism and structured neglect. Bodies become conflated with the toxic and the unwanted, and isolated from the temporalities of others. This becomes particularly visible through the separation of certain park-goers from undesirable social interactions with other visitors, but also with particular animals and plants.

At Stura Park, the expression of animosity, namely that of an interpersonal antagonism, creates a reciprocal distance between people, but cannot be reduced to an established form of conflict or antipathy. Although it remains implicit and mute, it nonetheless seems to be ubiquitous. Animosity, here, describes a form of tension that is both negative and positive; it is the attempt to obtain what you lack, which can escalate into rage, but which can also be transformed into a tool for political action, repressed or simply dissolved into the noise of the social. These stories suggest that we consider the experiential features of time – particularly the affective, embodied, aesthetic aspects of shared uncertainty and collective feelings of ruination – as moments as well as material realities, which destabilise the consensus of urban nature as something that is perfectly green, either ordered or unordered.



FIGURE 4.1 – A topographic exploration of Stura Park (Source: Barchetta 2019)

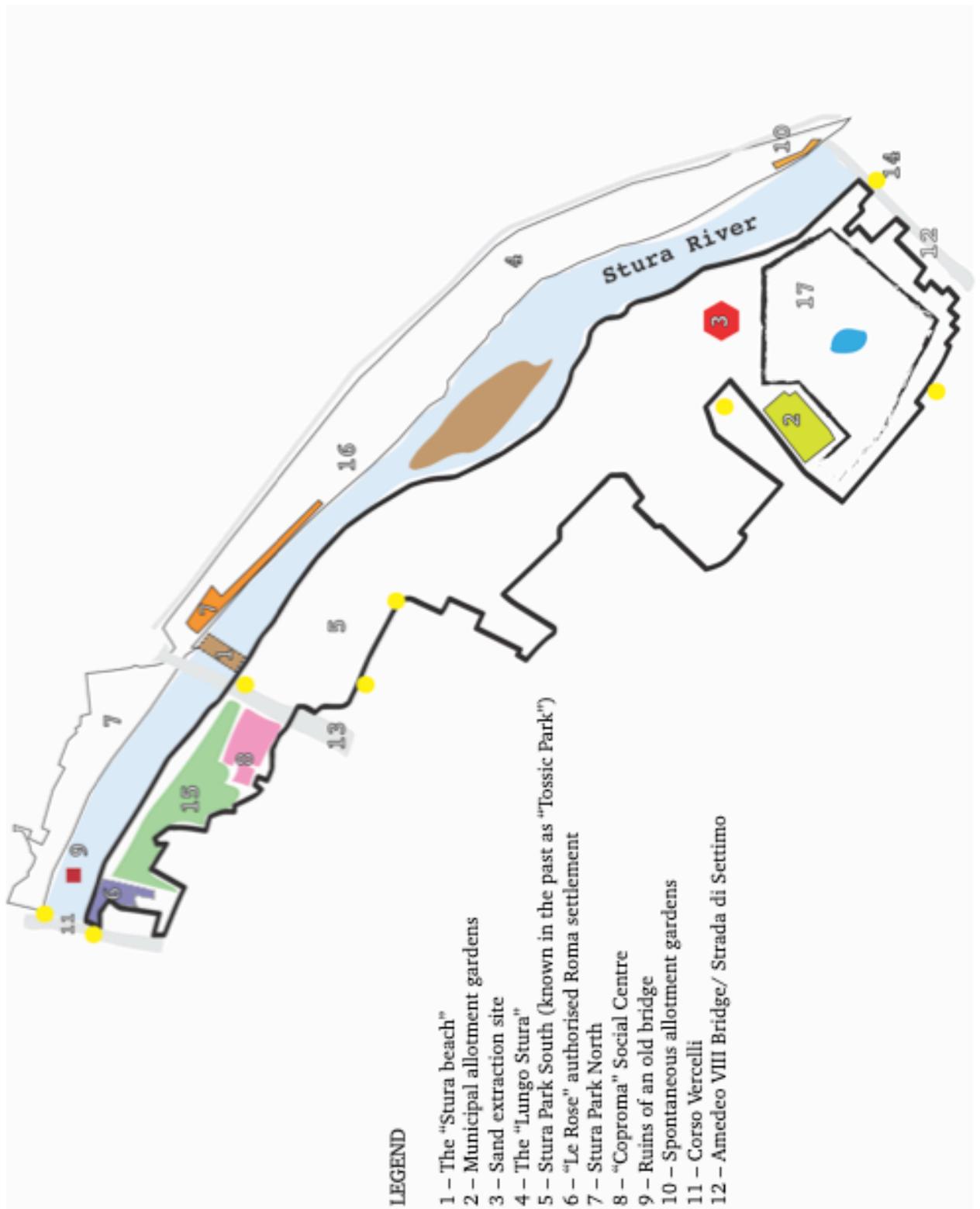




FIGURE 4.2 – From the left to the right, the ruin of the sand extraction site (Source: Barchetta 2017) and the remains of “Tossic Park” (Source: Barchetta 2017)



FIGURE 4.3 – From the left to the right, the ruins of an old bridge (Source: Barchetta 2017) and the “Stura beach” (Source: Barchetta 2017)



FIGURE 4.4 – From the left to the right, spontaneous allotment gardens (Source: Barchetta 2018) and municipal allotment gardens of the Arrivore Park (Source: Barchetta 2017)



FIGURE 4.5 – From the left to the right, Stura South's gate (Source: Barchetta 2018) and the jersey barrier of the "Lungo Stura" (Source: Barchetta 2017)



FIGURE 4.6 – Stepping into Stura Park (Source: Barchetta 2017)



FIGURE 4.7 – From the left to the right, shepherd Valentin and his caravan (Source: Barchetta 2018) and the private allotment gardens of the “Lungo Stura” (Source: Barchetta 2017)

CHAPTER 5

FINDINGS AND DISCUSSION

POLITICISING THE TEMPORALITIES OF URBAN NATURES

The theoretical approach and ethnographic methodology adopted in this dissertation have proven to be helpful for an investigation of the social and biophysical forces that shape urban environmental change, and for the way this change is felt, imagined, negotiated, lived, narrated and reworked in institutional realities and everyday life. “Social scientific writing on cities has historically evoked natural metaphors”, Draus and Roddy writes (2018, 2), to interpret the dynamics of urban change, for instance, through analogies with the body of living organisms and processes of ecological succession, as Gandy also points out (2006, 64). My dissertation illustrates that the issue of *degrado* has developed as an ecological imaginary and discursive framework of the Italian contemporary landscape, which associates structured neglect and environmental dilapidation with political corruption and moral-social decay. In recent years, the political use of *degrado* has also built unprecedented links with the populist-revanchist wave in urban politics, as “a strategy that fuses militarism and moralism with claims about restoring public order on the streets” (Slater 2009, 666). *Degrado* is a mobile category of discourse that is deployed not only to marginalise bodies, the risk underlying these formulations is that it also flattens difference and renders time linear, cyclical and homogeneous, by erasing the historical processes that have produced environmental change.

Building on this critique, this dissertation has ultimately proposed an atmospheric-based critique of *degrado*, drawing on the comparison of two case studies, which I consider exemplary of the contemporary uses and meanings of *degrado* as a political category and repository for feelings. By foregrounding temporality, I have shown the possibilities of understanding *degrado* as a cumulative process that extends across a thick temporal field. I have also highlighted how the “atmospherisation” (Thibaud 2014, 7) of *degrado* is reproduced and sustained by the, sometimes random and unintended, correspondences between meaning-making processes, the eruption of moods, the movement of human/non-human bodies and materials, the circulation of substances, the mobility of discourses and the formation of collective feelings. All these elements, studied as a connected whole, are understood as atmospheres. What can thinking about metropolitan natures through the concept of political ecologies of atmospheres add to the study of environmental change in Turin and beyond? At this point, the concept of the ‘political ecology of atmosphere’ needs further clarification,

in order to demonstrate the complementarity of two fields of study: urban political ecology and atmosphere studies. I have used the concept of the ‘political ecologies of atmosphere’ to encompass two clusters of ideas. On the one hand, I have used this concept to denote the socio-political entanglements with the sensory and biophysical realms that characterise metropolitan natures as an ensemble of concrete forms, which range from the micro-level of the body – human and non-human – to a variety of open space types (allotment gardens, parks, rivers). These bodies take shape in ways that are simultaneously affective, meteorological and infrastructural, and they stretch across multiple pasts, futures and presents. On the other hand, the concept is evoked as a way of interpreting and representing urban environmental change. In this regard, the political ecology of atmosphere foregrounds the possibility to build a political agenda towards urban natures and, more broadly, living environments, which involves atmospheres. I will return to this aspect in the final part of this dissertation, where I will answer the question of how to write and represent atmospheres.

This dissertation makes a contribution to the international field of environmental history (Evenden 2018) by offering an alternative approach to river historiography. It has explored the political ecology of atmosphere in order to understand human-river relations retrospectively. A look at the past of urban-riverine relationships has allowed me to show how the issue of *degrado* in metropolitan natures is linked to the specific ways in which cultures of nature have evolved in relation to the development of the socio-economic complexity of the city, its governance systems and conservation frameworks. This confirms my hypothesis of riverside Turin as a mosaic-like, fragmented and uneven type of landscape, framed by non-linear processes of development. It has also helped to explore the “social life” of open space designs and plans, as Bissell notes: “how long it takes for schemes to leave the drawing board, what happens as they move in stages closer to realization or get revised, disrupted, and even derailed altogether” (2016). In particular, this dissertation has shown Turin City of Waters has corresponded with difficulty in materializing a systematic and homogeneous program of waterfront rehabilitation.

What has emerged, however, is not simply a case study in the failure of a waterfront redevelopment to lift up areas of riverbank. This dissertation has helped to explore how plans, beyond specialised fields of practice and expertise, work behind the scenes in ordinary and everyday context. The unpredictable recombination of ideas, actors and governance arrangements, along with the question of delay and incompleteness in design and planning, challenge a vision of the socio-ecological temporality of riverside Turin as a timeline of progressive steps, which become visible through the mixture of planned and unplanned natures, never-attempted and half-finished interventions. The immersion in the lives and ambiances of Michelotti and the Stura have allowed me to further develop the interpretative hypothesis of the fragmentation of the post-industrial riverside, by exploring the ways in which *degrado*, as a social-political-ecological formation, mediates more-than-human coexistence and conflict in the two riverbanks.

Process of *degrado*

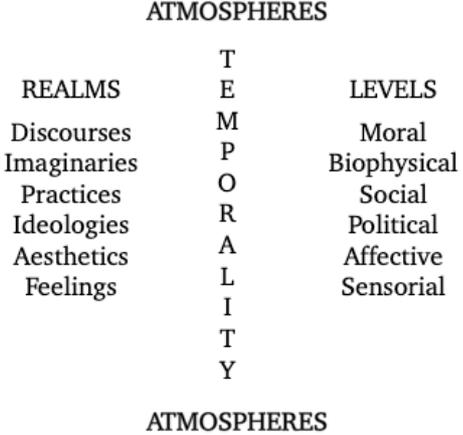


TABLE 5.1– The process of *degrado* and the multiple networks that activate it (Source: Barchetta 2019)

MICHELOTTI PARK

At Michelotti, the effects of recurrent processes of administrative abandonment, from 1987 until present, have concentrated on a particular area: the old zoo area. This condition has intensified the geographical and socio-ecological separation of the park. Research on urban decay has often identified a causal relationship between decrease of property values, patterns of capital disinvestment and damaged or abandoned green spaces (Lyytimäki et al. 2008, Brownlow 2006). This is not the case of Michelotti Park, where the abandonment of the old zoo is not the result of a widespread process of neighbourhood decline. However, my ethnographic exploration highlights how the park unlinks from its own location and becomes enrolled into broader networks of socio-economic change, which address the representation and recomposition of “ludic spaces” (structures whose function is to support entertainment), and how these changes are negotiated into the fabric of the city through time (Pérez De Arce 2018). Think, for instance, of the specular relation between the Michelotti and the Murazzi waterfront area, and how political impotence suspends these spaces between the material remnants of failed development projects, their potential as functioning outdoor spaces and their actual use. In 2015, when Michelotti became the target of a plan for a biopark, the proposed project created a “spatial amnesia”, as Colombino and Vanolo suggest, where “forgetting becomes a practice that illuminates the dynamics involved in current and past urban development processes” (2016, 2). The case of Michelotti

Park staged the transition from an industrial to a post-industrial zoo that reflected a re-appropriation of the Fordist approach to the design and planning of nature and amenity spaces in cities. It confirmed a vision of metropolitan nature that retained the boundary between nature and the city through the creation of a landscape of consumption, functionally and visually separated from residential areas and workplaces.

After the biopark plan went awry and Giò Park reopened, the playground that was located outside the old zoo area was dismantled, whereas the remaining parts of the park remained inaccessible. The plan for the redevelopment of the area is still under discussion, and is not likely to be finalised and implemented soon, given the resistance it is facing within the Municipality. By February 2019, the possibility of rehabilitation as opposed to dismantlement of the old zoo buildings (and particularly, the aquarium-reptile house) has become the subject of activist concerns about a new privatisation. They argue that the absence of a clear planning framework for urban green spaces – the long-awaited Green Space Master Plan (*Piano del Verde*) – poses further risks to the publicness of the place. In this sense, Michelotti is exemplary of worldwide warnings for the danger of the erosion of urban public spaces as a result of privatisation, excessive policing and over-surveillance. These discourses are the corollary of the vision of contemporary urban natures as places of contradiction and ambiguity; they are assets but also a nuisance as well as tools of collective control (Low and Smith 2013; Mitchell 2003). However, the case of Michelotti shows that the significance of “what counts as public property” (Blomley 2016) for urban green spaces runs deeper. It profoundly affects the multispecies intra-actions between plants, animals and humans, and how these become sites of politics and awareness in living environments. Indeed, concerns about the publicness of Michelotti Park are also about the perception and evaluation of the naturalness of the site, in the redevelopment process and in the dynamics of everyday uses. Particularly, the activist case of Michelotti has highlighted how the greenery, developed after decades of abandonment, has generated conflicts over the idea of the park as ‘ecological refugia’. The renovation of Giò Park has shown, however, that the preference was just that of removal. A form of temporal, and not just spatial, amnesia has emerged, which has foregrounded the difficulty of integrating the spontaneous natural development, which has occurred independently, with the remnants of the horticulturally-shaped landscape of the park, by reducing the potentials to understand how the rich, socio-ecological complexity of the place has evolved.

STURA PARK

The areas surrounding the basin of the Stura have been the target of a long-term process of territorial stigmatisation, affected by administrative negligence, the regulated exclusion of deprived populations from urban space and environmental

victimisation, coupled with the socio-spatial and economic reconfiguration of former industrial peripheral areas from the 1980s onwards. In particular, the torrent of the Stura flows in a southerly direction, through different neighbourhoods that are characterised by historical and socio-demographic specificities (as explained in the introduction of this dissertation). During the nineteenth and twentieth centuries, the areas around the basin became an emblematic site of working-class and industrial history of Turin. Here, migrants lived and worked, surrounded by powerful industrial soundscapes, the texture of dust, the recreational value of water and the remnants of agricultural lands. From the 1980s onwards, the area became paradigmatic for the negative effects of deindustrialisation: high unemployment rates, a sometimes conflictual co-existence between ‘old’ and ‘new’ migrants, and high population density induced by the concentration of cheap housing prices and public housing areas. These effects haven’t come to an end yet; consequently, the social stigma of a deprived area suffering the contradictions of late Fordism, the socio-ecological effects of deindustrialisation and the local repercussions of the post-2007 global crisis, still compress the area and affect its image as a fragile periphery.

The edges of the Stura benefited in part from the political season of regeneration policies, for example through the Special Periphery Project and the riverine uplift programme (mentioned in chapter 2), between 1997 and 2010. Notwithstanding the importance of these initiatives, they have also made visible the difficulty of building a dialogue between the central administration and local territories, as they increase and reproduce the socio-spatial condition of marginality and fragmentation of the area, which today is characterised by a mix of uses: residential, industrial and commercial. However, the stories of the Stura say even more than this. In fact, the physical, ecological and social fragmentation of riverside spaces can be considered the result of multiple trajectories of ruination, stretching across different and conflicting temporalities: those of clean-up interventions, the temporalities of depollution, political and bureaucratic time, along with the time-spaces of daily, lived experience. This aspect contributes to call into question urban decay as an interpretation of open space transformations, since the typologies of environmental change result from the intersection of a variety of processes of degradation, which local governments have not always been able and willing to capture.

The issue of ‘peripheral areas’ has been at the core of the Five Star Movement’s propaganda, to the extent that the polls in the peripheral neighbourhoods contributed to a great extent to the expulsion of the left-wing majority from the Municipality. However, ever since the Five Star Movement took over, there is a strong feeling that Turin is no longer being managed. Mayor Appendino abandoned the Movement’s political promises, and citizens feel ignored and abandoned too. The political climate of the recent years has increased the threatful consequences of rhetorics of *degrado*, evoked in racist discourses directed at ethnic minorities, and especially the Roma population. Social hostility, in turn, has increased fears of nature and the stigma associated with spontaneous vegetation. It is clear that, in this context, the acceptance of what appears as an unconventional open space can be problematic. As the German urban ecologist Ingo Kowarik writes, “the perception of

the post-industrial nature is damaged by the stigma of the painful social changes that made such nature possible” (2005, 3). Indeed, the socio-ecological peculiarity of the site – the mix of fields that result from agricultural uses, horticultural interventions developed after the clean-up, and the woodlands that emerged from the ecological succession of severely disturbed industrial riverbanks – remains unspecified. It has not been completely acknowledged by technical experts and political decision makers, but it has also not been carefully communicated to the general public. For this reason, the everyday perception of its naturalness and wilderness often leads to confusion, or it is largely ignored.

“WHAT IS HAPPENING IN TURIN?”⁴⁷

A situated political ecology of atmospheres in urban natures necessitates a consideration of the role played by landscape management practices and politico-administrative maintenance cultures; these seem to have contributed to processes of ruination in many ways. The city of Turin has undergone rapid and important, urban physical transformations, which have provoked widespread criticism and controversies about the course of urbanisation, and its relationships with natural environments. For instance, the publication of the Urban Green Regulatory Plan in 2006 sprang from environmental groups’ warnings against the way major infrastructural works were being conducted, and how these damaged existing green spaces, trees in particular. In addition, the purpose of this regulatory plan was to push the project of the ‘Urban Green Master Plan’ forward. As mentioned above, the latter that has not been developed yet, although the master planning of urban green spaces has been part of governmental programmes from the nineteenth century onwards. However, remarkable projects of landscape restoration of the riverine landscape have now become illustrative examples of the synthesis between advances in ecological restoration and landscape design in former industrial areas.⁴⁸

Many old industrial areas across the Atlantic have been framed as parks. Examples include the Schöneberger Südgelände, a railway yard in Berlin, and the Landschaftspark Duisburg-Nord, in Germany’s Ruhr district. These sites are widely recognised as forms of urban industrial natures, where industrial structures merge

⁴⁷ “What is happening in Turin?” is the title of a series of events organised by a group of scholars from the University of Turin, starting in February 2019, by way of reflecting on the climate of protest and activism against the city’s government, which is led by an exponent of the Five Star Movement. In particular, the launch of the events followed the dismantlement of one of the oldest social centres in Turin, which was based in the Aurora area, a district that has undergone growing gentrification processes in the last five years. The purpose of these public meetings was to create a space of discussion between academia and civil society, about the securitisation and militarisation of urban areas in Turin and beyond, and the role of populist-white-revanchism in the current situation of political turmoil and civic discontent with the city’s decay.

⁴⁸ Think, for example, to Sangone, Meisino and Dora Parks.

with new forms of wilderness through the integration of regular horticultural planting and spontaneous vegetation, which developed during the decades of abandonment (Kowarik 2013; Storm 2013). In this regard, the case of Turin is particularly interesting, given that this form of industrial nature struggles to gain recognition in the local system of green space planning. The latter is uncertain as to how new ecosystem types that emerge as a result of incompleteness and abandonment are to be evaluated, in relation to the wider socio-spatial context in which they have developed. In this regard, the case of Dora Park is exemplary of the way in which nature is treated “more in line with the horticultural nature of traditional parks and well-managed gardens, than the green spaces growing spontaneously on vacant lots and old industrial areas” (Storm 2013, 116).⁴⁹

Over the course of my research, Dora Park often served as an additional object of comparison between perspectives of naturalness and urban environments. Its creation was much applauded but also criticised, among other things for not taking sufficiently into consideration local residents, but also for the dispersal of dust during reconstruction works and the persistent presence of hexavalent chromium in river water, which engendered demands for the adequate cleaning up of the environment (Comitato Spina 3 2011). Plant species were also the subject of public concerns among dwellers and municipal landscape designers. The German landscape architect Peter Latz designed Dora Park, but horticultural interventions were readjusted and completed by the city’s Green Space Department. This aspect shows that there are interesting parallels with the cases of Michelotti and Stura, in relation to the temporal gap that exists between the design and the implementation of green space projects. This, in turn, highlights the fact that the issue of delay, defeat and diversion from the initial intentions of designers and planners must be taken seriously.

Before planning, it is highly necessary to build a different knowledge of urban natures, and how they evolve. In other words, one has to know them well and spend time there, and this process of spatio-temporal localisation can take years and more. It entails a profound action of cultural change to reorient consolidated maintenance practices, especially in institutional contexts like Turin and, more broadly, Italy; here technical experts of the Green Space Department at the municipal level play a central role in the implementation of greening projects, although other professional figures may be involved in the planning process as well. Over the course of the sit-down interviews that I conducted with institutional actors, these usually made reference to the movie character of Indiana Jones when they described landscape architects and agronomists of the Municipality; they would thus portray these as adventurers moving across the no man’s lands of the urban fringe, which could in fact be defined as a jungle of laws and regulations, or as a complex net of vegetation types, used in informal way.

⁴⁹ Ann Storm points to the work of the urban ecologist Ingo Kowarik and the “four nature approach” (2005), a framework developed to communicate the variety of green space types.

To cite the words of the former president of the Po Riverside Park in Turin: “The challenge is not merely to re-naturalise the riverbanks, but to recreate a lost landscape, to reconstruct its environment and history. To this end, the first task is to **demolish** the sedimentation of **ugliness**; in other words, to clear the territory and rebuild it” (SI08). These words elucidate several insights that lend themselves to my consideration of the production of territorial knowledge, on the one hand; and to the “political function of ugliness” (Rodrigues and Przybylo 2018) in processes of landscape restoration, on the other hand. From this it emerges that these aspects cannot be separated from one another. Indeed, ugliness (the word can be used interchangeably with **degrado**) is not only an aesthetic designation. It functions politically to mark a set of hierarchical binaries between beauty and ugly, habitable and uninhabitable zones. Processes of ruination can be attributed, in part, to a lack of understanding of or interest in the history of, and community attachments to, urban green spaces by management authorities.

My case studies also opened up possibilities to reflect on environmental thinking and practice in the context of Turin, and how these contribute to shape ideas about naturalness and wilderness in nature resource management and conservation. For instance, the Michelotti case highlights how uncertainty in the levels of public participation and different priorities among common citizens and activists emerge in public debates, bringing to the fore the divides in the political project of Turin environmentalism. Some citizens and activists are radically rethinking the meaning of nature in the city, by rejecting the idea of a massive clean-up intervention, which they claim would dismantle an ‘island of biodiversity’ and also its threads of memory; other groups show a preservationist ethic, which combines an interest to conserve wildlife with a priority for social and spatial order. This is also visible in the case of Stura Park. From the late 1980s onwards, the confluence between the Stura and Po became the object of environmental activist campaigns, sustained by the Italian Green Party, for the approval of the Po Riverside Plan, which subsequently led to the foundation of the Po Riverside Park (1990). The Stura has shown the increasing difficulty of building a dialogue between historic preservation plans, characterised by conservationist approaches to the evaluation of local ecosystems, and the complexity of social natures. The impulse to control and reproduce a balance of nature in conservation approaches hinders the ability to address environmental issues, by bringing into light the limits of modern environmentalism, which reproduces the nature-culture divide by unlinking nature from the socio-political processes that have transformed ecosystems. In this sense, everyday practices in urban natures make possible to re-politicise environmental politics, and to recast the relationship between scientific and cultural practices.

POLITICISING THE ATMOSPHERES OF URBAN PUBLIC NATURES

While acknowledging that the physical dimensions of the city encapsulate the most visible manifestations of tensions linked to urban life, I have emphasised the importance of considering the issue of *degrado* as a process that isn't produced by the sole modification of the physical environment. I have also stressed that the issue of *degrado* can have a powerful influence on the formation of collective feelings of ruination, which I have defined, among others, as the common sensation that something bad has occurred or will happen soon. *Degrado* has become a repository for "everything that does not quite fit" (Rodrigues and Przybylo 2019, 16). The last part of this concluding chapter will focus precisely on the public nature of atmospheres, by questioning to what extent they can be shared, and how they can inform us about more-than-human sociality and difference in urban natures. Over the course of this dissertation, I have advanced the hypothesis that the *degrado* rhetoric acts as a mechanism of generalisation, albeit complexly mediated and distributed among various agents, which effectively obscures the socio-political forces that have produced processes of environmental change. I have shown that this mechanism encompasses different realms – discourses, practices, ideologies, imaginaries and aesthetics – and levels – moral, social, sensorial, biological, affective and legal – and that it includes a wide range of political ecologies that extend from the human body to the elusive entity of air. *Degrado* determines which subjects and populations are made to live and let die (Lorimer 2017), on the basis of divisions between matter-in-place and matter out-of-place (Douglas 1966), and the spectrum of rights and responsibilities associated with each condition. In doing so, it creates unpredictable linkages between political and biophysical realms: the right to inhabit.

Building on a biopolitical understanding of decorum, and its opposite *degrado*, Tamar Pitch (2013) and Carmen Pisanello (2017) have, in a similar way, claimed that these terms act as aesthetic devices, which enable demagogic discourses and disciplinary apparatuses by performing as instruments to control space and society at large. The study of the contemporary uses and meanings of *degrado* in the context of Turin's post-industrial riverbanks offer the possibility to amplify biopolitical thought, by demonstrating that the reduction of urban environmental change to a question of socio-ecological control and order not only normalises but also anaesthetises the collective experience of living spaces. In post-industrial Turin, discourses of blight produce an ecological imaginary of environmental change, in which human bodies, as well as botanical species and other material traces of the past, are viewed and represented as victims of *degrado*. This condition is often expressed through feelings of diffuse boredom and stress, which emerge in the context of the confrontation with recurrent processes of abandonment and ruination: damaged species, the decay of physical equipment, the incivility or threatening presence of bodies that litter (think of migrants and weeds), inadequate maintenance, the failure of plans, and the public degrading of space in political discourse and media representation.

Boredom originates from a situation in which one is forced to await something that is delayed. It is a feeling of resignation, and an accusation. Here, boredom differs from the “comfort-boredom circuit” theorised by Sloterdijk (2013, cited in Brighenti and Pavoni 2017, 7), who discusses how comfort, which means the conditions of being in a safe place, provokes boredom. Boredom is a “slogan for general uneasiness” and discomfort (Wellgraf 2018). Within this context, practices of ‘resistance’ often become normalised and are transformed into anaesthetised practices of ‘resilience’ (Slater 2014), in the extent to which the reconfiguration of a park into a waste space frames environmental change as the negative effects of urban austerity, of the actions of governing subjects and the reactions of deviant individuals. This in turn reproduces an understanding of public nature as an inert site of mere consensus, in which objects and persons circulate according to a shared horizon of comfort and happiness. In terms of the design of an urban green space, it over-reduces the complexity of nature to micro-patches of functional areas through which the division between nature and society is reproduced, even in certain attempts to overcome it. The study of the temporalities of urban natures through atmospheres allows me to interpret the rhetoric of *degrado* as a means of managing the micro-logics of social life, and the empathic force that integrates bodies and the surrounding environment.

The *degrado* rhetoric represents a form of anaesthesia that does not let us open our eyes to the reality of the destructive functions and characteristics of capital by determining what becomes an acceptable loss. It helps rethink power through its varying intensities and transmissions from the individual level to the collective. In other words, “practices can be shaped from below through the transformation of sensory experience” (Stoller 1997, 75). *Degrado*, understood as a repository for feelings of boredom, sustain the duration of ‘the feel of the place’. In this sense, the political ecology of atmosphere, as a way of investigating the relationship between material decay and urban natures, has a double meaning. On the one hand, the embodied political ecologies of urban natures, understood in terms of atmospheres, are key to understanding environmental change and decay as something that is understood and perceived, but also felt, often in pre-reflexive ways. On the other hand, the study of the issue of *degrado* through atmospheres highlights that discourses of blight are not only the product of the destruction and neglect of the physical environment; the powerful influence of rhetorics of *degrado* is also dependent on the “atmospherisation of living spaces” (Thibaud 2014, 7). Over time, *degrado* tends to re-form bodily and social space, by changing the kind of impressions that people can get from a public space. Through the paradoxical interplay of hypervisibility and anaesthesia, the atmospherisation of *degrado* organises the way collective life comes to be imagined or felt; it thus determines the impressions we have of landscapes and bodies, and our attribution of bad feelings to landscapes and bodies.

One problem with the blight rhetoric concerns its “consequentialist bias”, as Demos argues with regard to the Anthropocene rhetoric (2017, 95). This bias refers to the tendency of the Anthropocene rhetoric to focus on the effects of environmental

change – ugliness, dirt, disorder, waste – by overlooking non-human agents. The transformation of bodies into victims of *degrado* works to secure humans from supposed noxious and risky others (i.e. vulnerable humans, animals and weeds), by sanitising and purifying some environments, and displacing ‘the dirt’ onto other spaces and bodies. This is reflected in the definition, by management authorities and other park-goers, of the ‘immigrant problem’ of parks (mentioned in chapter four). However, this issue is by no means a human affair. It extends across different ecological fields, including animals and vegetation. Its designation through the use of categories such as the domestic and the wild, regulates the process of making an open space only acceptable to certain human beings. *Degrado* has a powerful influence on the creation of public feelings of ruination. However, this doesn’t have to mask the fact that atmospheres can be experienced and negotiated in radically different ways.

There is also the expression of an animosity; as mentioned in the final pages of chapter four, this is a feeling that reflects a form of conflict that is both negative and positive. It is the attempt to obtain what you lack, which can escalate into rage, or be transformed into a tool for political action, repressed or simply dissolved into the noise of the social. Animosity can be felt in gazes, words and through pain. But there is also a temporal dimension to take into account. Animosity slips into consciousness over time, and allows more-than-human difference not merely to be tolerated but acknowledged. Animosity also highlights the frictions that arise between discourses of *degrado* as a dominant temporal narratives, and the embodied and shared experience of degradation. The ways in which subjects relate to collective feelings can be varied. There is, indeed, difference in the way environmental change is lived and felt. But there is also difference in the way the temporality of environmental change is understood. This produces frictions, which show how anaesthesia and animosity offer ways of interpreting the lived experience of urban public spaces.

Another aspect on which I would like to focus is the formation of post-industrial subjectivities, and, particularly, how different subjects affect the type of histories that could be told at different times about landscapes that have experienced neglect. On the one hand, by drawing on research into urban atmospheres, my aim has been to analyse how processes of degradation depend on their particular socio-spatial and historical context. On the other hand, the description of the tight entanglements between discourses, practices and the elements of air, water, terrain and light have offered elements for the understanding of urban environmental change as nebulous and diffuse reality. This aspect is particularly interesting given that urban environmental change, although being widely identified with a progressive notion of time and with the acts of seeing the transformation of physical environments, is experienced synesthetically and anachronically by park-goers and residents: through the complementary engagements of smell, sound, touch and vision, among other things. Post-industrial subject formation takes place in the process of evaluating the natural and wild attributes of places—what is the correct nature in both scientific and cultural practice. Drawing on the work of Sapana Doshi (2018), the role of “differentiated environmental subjectivities”, rather than discrete groups, is key to

understanding the political ecologies of atmospheres and ruination in relation to urban environmental change. The atmospheric experience of environmental degradation shows that the body is the site of politics and conflicts over how the temporality of urban natures is evaluated. Temporality plays a key role in the construction, experience and conceptualisation of environmental change, by showing the importance of disaggregating “a putatively shared historical time from embodied shared experiences” (Bastian 2014, 143). Conflicts over how the temporality of urban nature is understood arise not simply in relation to a dominant temporal schema, namely administrative abandonment, but in relation to divergent and contradicting temporalities, which include some bodies while excluding others. In this sense, discourses of blight not only identify something that is ‘out of place’, but also establishes a division between matter-in-time and matter out-of-time, by assigning culpability to those that block change or are the supposed causes of undesirable changes.

CONCLUDING THOUGHTS ON WRITING AND URBAN NATURES

These discussions set the stage for the closing part of my dissertation, which delves into the topic of writing and its contribution to processes of urban environmental change. In this study, I have explored – through theories, ethnographic vignettes and reflexive accounts – how any engagement with urban environmental change must contend with the co-constitutive character of representations and material worlds. This way of engaging with the generative composition of the every day has certainly influenced the presentational practices of this research, which is precisely what I want to address in this section. I remember my earliest attempts to write on this topic. It was the very beginning of my research fieldwork and I didn’t really know how to write atmospheres, or even how to ‘write atmospherically’. For me, atmospheres – that is, the way I understood those things that take place in the social-aesthetic-material-political life of riverbank spaces – only became discernible over the course of the ethnographic practice, by going around, “surfacing” (Ahmed 2004, 25) individual and collective feelings, detecting things like a “seismographer” (Citroni and Pavoni 2016, 252) and registering the waves generated by everyday scenes and encounters. My capacity to write about the changes in the ecologies of post-industrial riverbank spaces has grown across a vast, temporal field of practices, long before starting to write the dissertation, by jotting fieldnotes, drafting papers and writing short reports about research activities. These writing exercises ultimately addressed my concerns about the ways in which we produce knowledge *in* and *of* urban natures. This argument, however, applied more generally to the formation of ethnographic knowledge during the research process.

The question of how we could learn, build and integrate knowledge about the temporalities of urban natures is particularly relevant as we are confronted with the destruction of global environments by anthropogenic pollutants at different scales. Our present is bombarded by words and images. The Oxford Word of the Year 2019 is the adjective “toxic”, which means poisonous. Toxic has been used in an array of contexts, both in its literal and metaphorical senses: toxic substances, toxic environments, toxic relationships and toxic cultures. This example offers an interesting parallel between the rhetoric of the Anthropocene and that of *degrado* in Italy, by demonstrating the force of words (and especially overused words) – and the visual imagery that they convey – in framing our everyday lives and environments (Van Eekelen 2004). T. J. Demos points out that we hear or use the word anthropocene and find ourselves participating in an apocalyptic imaginary and global feeling, which hides and “numbs us to the reality of the destructive functions of capitalist culture” (2016, 267). In a similar way, we hear or use the word *degrado* and we become, willy-nilly, participants in a common feeling of threat and disgust that obstructs the socio-political and economic processes that sustain the intensification of those feelings. As Rebecca Solnit (2014) argues, with regard to the idea that climate change is global-scale violence, “the revolt against brutality begins with a revolt against the language that hides that brutality”.⁵⁰ This aspect is particularly important for an understanding of what we can learn from the ruined forms that are produced by the articulation of global environmental and metropolitan changes. For this reason, my atmospheric-based critique of *degrado* emerged from the necessity to call into question the political uses of this term and, conversely, to find neutral or alternative, localised vocabularies through a glimpse in the fragments of everyday life and social histories. In other words, by describing ‘what happens’ and how people talk about atmospheres ‘in their own terms’.

This study is an effort to build a correspondence between words and lifeworlds. In this sense, it participates in the project undertaken by scholars who, over the last two decades, have developed non-representational theories and methodologies, striving to re-envision (and not to erase) the question of representation in research, beyond the predominance of textualism and realism in social sciences. By transcending human-centered exceptionalism, they have animated research by taking to centre stage the expressive force of relations between feelings, non-human matter, pre-reflexive experience, technologies and human subjectivity. The localisation of the researcher in this field of practices and relations produces a knowledge that is situated and deliberately incomplete. Confronting what exceeds linguistic representation, it’s all about reaching the expressive force of everyday life. The ethnographic explorations presented in chapter two and three represent the result of this effort by mixing social analysis, ethnographic detail and storytelling. I have shown how an atmospheric-based approach to the temporality of urban natures can establish a different place and time for words to make visible the complexity of social natures, rather than to simplify them.

⁵⁰ Climate Change is Violence (The Encyclopedia of Trouble and Spaciousness, Trinity University Press, 2014) <https://www.theguardian.com/commentisfree/2014/apr/07/climate-change-violence-occupy-earth>

But what exactly is a 'story'? I claim kinship with Kathleen Stewart, when she argues that stories emerge "in a precise mimetic tracking of events and grows dense in cultural tensions and desires. Local voices are launched from within a space of contingency and the truth of things is lodged in the concrete yet shifting life of signs – a network of tellings, and retellings, displacement, and remembering" (1996, 4). This definition of story radically differs from the "set of practices of selective storytelling enacted in processes of urban branding and planning, as a way to manage the impressions that investors, occasional visitors and inhabitants might get" (Vanolo 2008, 3). Think, for example, of the power of "storytelling", and the accompanying walking tours, in urban development processes, as a way of escalating public appreciation towards spaces regarded as aesthetically and socially negative (Sandercock 2003). Academic prose is an act of responsibility towards landscapes and subjects, which can lean on an epistemological reassessment of the ambiguous notions of 'waste' and 'blight' space.

This dissertation makes clear that there is no single solution, or sole approach, to socio-ecological predicament. Responses are urgently needed from the cultural realm, which may address the controversial relationship between scientific approaches and public cultures of nature. My research explains that normative, temporal frames reinforce discursive divisions between urban and natural processes, and reproduce the moral geographies of human and non-human relations, which contribute in many ways to degradation. Indeed, a contradiction emerges between the widespread ontological awareness that the natural and the social are tightly connected, in conservation frameworks and public discourse, on the one hand; and the persistence of nature-society, ethical dualisms that emerge at the level of everyday experience, on the other. Furthermore, the dissertation directs attention to the ideological dimensions underpinning the creation of urban natures as a means to reinvent urbanisation; they do so by providing services aimed at remediating the failures of infrastructure. The vital importance of open spaces in urban city life has been acknowledged by urban environmental history ever since the rise of industrial metropolises. Over time, the socio-ecological aftermaths of industrialisation have deepened environmental concerns, necessitating their systematic integration within the urban planning agenda. As a consequence, in North American and European cities, the provision of 'islands' of nature became a means to provide healthier environments and to help inhabitants recover from the 'bad air' produced by urban and social transformations. The notion of urban parks as curative technologies was significantly fostered by the 'hygienist' theories driving nineteenth-century public health reform (Ischia 2012). A deterministic idea underpinned the relationship between place and health, and consistently drove the large-scale transformations of the industrial metropolis; the environment was inevitably the cause of diseases and social problems (Wolch, Byrne and Newell, 2014). Park and garden developments celebrated the creation of a sanitised urban life.

Since the 1990s, new environmental planning practices have been formulated, new nature-based solutions have taken place and different languages of nature have

emerged (Kabisch et al. 2017). The Sustainable Development paradigm has contemporaneously summarised these shifts and indicated the mobilisation of environmental assets as constituent parts of the transition to post-industrial cities, and to new regulatory approaches of the urban political economy (Isenhour et al. 2015). Here, a joyous union between humans, city and nature is presented, which not only proposes an alternative to urban landscape, but also an alternative to society itself. A reaction to the ‘evils’ of society seems to constitute a common thread in these discussions about open spaces, both historical and contemporary, which confirm didacticism and environmental determinism being essential traits of the history of planning theory and practice (Richards 2012). The common vocabulary is greening the city. But is it always appropriate? Can we really conceive urban environmental change as a circular closed loop condensed into the pathway of degradation-restoration and vice versa? This dissertation suggests it might be time to go beyond the idea of “biophilia” – the belief that nature is a mainstream measure to improve the life of people – to revisit the way we study places (Reeve et al. 2015).

The aim of this dissertation was to build a theoretical and empirical dialogue between the fields of atmosphere studies and urban political ecology, by exploring the political, social and material context of the atmospheres of environmental change. In particular, it directs attention to the importance of evaluating nature discomforts and processes of decay in urban settlements. In doing so, it makes a contribution to planning practices and decisions regarding urban decay, in that it highlights the importance of considering the multiple temporalities, and not only spatialities, of urban natures. It shows how a politics of urban nature must build on the production of a territorial knowledge that holds together ethnographic specificity and generalisation to contribute to a politics of urban natures, which is focused on specific cases and issues. An atmospheric critique of the temporalities of urban natures may help move beyond the role that *degrado* plays in the dynamics of environmental change, no longer considering it as a purely aesthetic category and property of seeing. It helps foreground the fact that public discourse puts emphasis on what counts as ‘beautiful’ or desirable open space and what does not, and that this emphasis often relies on an all-too-human capacity – which is not even shared by all human beings! – to define what is the appropriate type of nature.

The public value of urban natures should not be linked to the sole search for human entertainment in nature through visual pleasure, that is, the picturesque vision of nature. This research notably contributes to demonstrate that visual qualities also lie within olfactory, sonic and tactile qualities, as well as in pre-cognitive responses to the natural environment. Body and motion play a key role in this endeavour. This research focused on walking as a means to build a collaborative knowledge of environmental change that may enhance the field of urban political actions, and also help city dwellers and activists to think and experience differently the life of open spaces. Nowadays, the walking tour has gained extensive institutional endorsement as a participatory exercise for neighbourhood development. It plays a strategic role in gentrification and urban change processes, by helping to bring out the symbolic and cultural value of a place. This research promotes a way of walking politically –

and not voyeuristically – as a means to counter the speculative logics of urban development, which use the aesthetics of urban space and beauty to produce new frontiers of exclusion and marginalisation.

Riverbanks made by walking envisages that a future research agenda on environmental change and urban natures needs to start from the consideration of the generative possibilities of thinking atmospherically, that is, considering what is perceived as ‘ugly’ as a way to reframe visualisation, narrativisation and marginalisation. In doing so, it affirms a messy, more-than-human co-existence in a world of differences, one that does not make reference to a singular Nature.

APPENDIX

EXPLORING ATMOSPHERES ETHNOGRAPHICALLY

AN INTRODUCTION TO WALKING AS A PRACTICE AND METHOD

The impetus for this work sprang from a river walk at Michelotti Park. I gathered with a group of anti-speciest activists, who had organised a botanical walk in order to raise questions about urban life and ‘ferality’, a term the activists condensed into the Italian word *selvatico*. Much like the English word ‘feral’, *selvatico* describes landscapes and species considered as not domesticated, usually dwelling in the “detritus of failed infrastructural projects” (Larkin 2013, 333). This category extends to include “ruderal vegetation”, which refers, as I pointed out in the early pages of my dissertation, to plants that grow in garbage dumps, vacant lots and industrial wastelands (Stoetzer 2018; Elphand 2006). We walked along the bank of the Po River, paused in front of the main gate of the former zoo, and then crossed the park to visit the cages where the animals were once kept. Giovanni read a few old newspaper articles and headlines recounting the episodes of zoo animals escaping, and of the zoo being dismantled. We slackened the pace and stopped to look at non-native plants, then wrote a message about the possible meanings of *selvatico*, and hung it on the trees. The walk evolved around the conflictual and normative politics of domesticity in relation to non-human life, materialised by the presence of animal cages. The dry leaves screamed as we passed by, and I captured our fleeting words and gestures with my voice recorder and sketchbook.

This is just one example of a long list of walks that I have sought to analyse in this dissertation. Indeed, walking has been integral to the development of my research, offering countless possibilities, alone or in small groups, to engage with everyday atmospheres of open spaces in riverside Turin. Since the early stages of my research, the purpose has been to build a “methodological sensibility” (Lancione 2016, 9) that bears on walking, understood both in terms of an everyday practice and a research method, as a route to develop a relational and grounded knowledge of post-industrial riverbank spaces in Turin. In other words, a different way of thinking and performing research in urban natures. The desire to go out into the fields or woods is by no means ‘natural’, but is largely the result of the historical role that walking played in the production of particular cultures and tastes of nature. This idea is certainly one of the pillars of the book *Wanderlust* (2001), by American writer Rebecca Solnit (2001); it is widely considered as an anthology of historical reflections on the literary, ethical and philosophical movements associated with

walking in relation to notions of landscape and subjectivity, and across a broad range of contexts, including rural and urban areas. Chapter 12 of Solnit's book propels the reader in the city of Paris, where Walter Benjamin wrote about the walker's experience of the city, drawing on the Baudelairian figure of the *flâneur* (the daguerreotype of the walker associated with the interpretation of city life in the mid-nineteenth century), "who goes on *botanising* the asphalt" (1997, 36). Benjamin presents the street walker in terms of a new kind of naturalist, who carefully senses the changing landscape of the city 'on the move', just like botanists like to be outdoors to study plants (Clark 2000).

Movement and walking have, in fact, been at the basis of my embracement of urban natures, as a guiding ethnographic tool and social activity. The first step in examining the potentialities of this way of thinking and practicing research has been the acknowledgement of ongoing conversations regarding walking methodologies in qualitative research. In particular, the works of Sara Pink (2015) and Springgay and Truman (2017) have provided exemplar overviews of the ways in which walking (as both method and methodology) has been theorised and utilised across various strands of social science research, including in the fields of performative and visual arts. Here, I focus my attention on the interrelation between walking and urbanity, and how this interrelation has allowed me to experience the frictions, continuities and surprises associated with shifting metropolitan landscapes, in moments of socio-ecological change. In this perspective, a ubiquitous reference is the situationist *dérives* (drifts), mainly associated with Guy Debord and the Situationist International (1952–1972); this practice echoed the surrealist *déambulations* (stroll) experiment, while simultaneously engaging more actively with new ideas in urban studies. The work of Henri Lefebvre, in fact, provided a fundamental inspiration for Guy Debord, as it confirms the interest in everyday life (Davila 2002).

The arts have taken these historical precedents on board, and incorporated walking into accounts of contemporary urbanism through the use of environmentally engaged art, thus viewing walking as both an individual aesthetic and a socially grounded activist practice, which in many cases has a strong urban orientation (Evans 2012). For instance, the American artist Robert Smithson treats walking as a form of earthwork; through his tour (turned photo-essay) in the city of Passaic, New Jersey, Smithson observes the intensification of American urbanisation in the late 1960s. Walking along the banks of the Passaic River, he observes the "minor monuments" of highway construction projects, and ponders the socio-ecological consequences of that history of modernisation, which he describes as "ruins in reverse", "the buildings rising into ruins before they are built...the memory-traces of an abandoned set of futures" (1967, 53-57). Also worthy of attention is the work of the British walking artist Hamish Fulton, and particularly his walk along the Milk River and through the Badlands of south-eastern Alberta. Photographs and texts provide historical and geographical information relevant to an understanding of the landscape as the result of an action: the river walk. Richard Long's *A line made by walking* uses the act of 'stepping on the ground' as a means of recording the physical intervention in the landscape, by merging performative practice and

everyday life.⁵¹

Notable other examples include the pioneering *Step by Step* (2007) by French urbanist Jean François Augoyard, famously influenced by Michel De Certeau's (1992) ruminations on walking as a way of exploring the different spatialities and temporalities of the urban text. Coming from a different angle, Francesco Careri's *Walkscapes* (2006) is an examination of travelling on foot as an aesthetic practice of 'transurbance', a mode of critical walking in leftover spaces and a means to build up an interdisciplinary mapping of the transformation of metropolitan areas.⁵² The emergence of a body of research within the field of cultural studies called strollology (*Spaziergangswissenschaft* in German), associated with the Swiss architectural thinker Lucius Burckhardt (2012) and the artist-sociologist Bertram Weisshaar (2013), confirms the renewed attention that walking has received more recently, in relation to theories of place and urban design. Burckhardt claimed that new design intelligence was not only embedded in everyday life, but constructed while taking a stroll. The only aesthetic one can produce is strollological, he argued, for the simple reason that walking is a means for the human body to explore and build knowledge of place, while also reaching a higher awareness of the close relationship between the human and non-human world.

In recent years, the 'rise of walking' as a research approach in social sciences agendas and across the humanities has significantly increased. It has also inspired qualitative researchers engaged in the investigation of a variety of issues associated with the urban space and quotidian mobility (Brown and Shortell 2016). This success can be explained by the prominence of notions of movement and flow in theories of space (Massey 2005; Ingold 2008), by the growth of mobility studies and by the establishment of connections with the subdisciplinary worlds of tourism, migration and commuting (Bissell 2018; Adey et al. 2014; Sheller and Urry 2016; Cresswell and Merriman 2011; Adey 2009; Cresswell 2006). Here, I want to return to walking as a methodological concern within discussions on the ethnographic practice, primarily in the study of the interrelationships between different types of walks (functional, aesthetic and experiential), the place-making process and the formation of subjectivity (Lorimer 2013; Wylie 2013; Rose and Wylie 2005). Let us also consider Vergunst's (2010) work on the temporalities of the pedestrian experience in city streets; the street phenomenology of Margaret Kusenbach (2003); the walking interview theorised by Jones and Evans (2012); and the commented walks (*parcours commentés*), which Thibaud (2001) formulated for French-language empirical research on ambience. Movement on foot is also analysed in Degen and Rose's (2012) sensory experiencing of urban design, the above-mentioned sensory ethnography of Pink (2015) and Andrew Irving's exploration of wandering as a way to understand people's inner lives (2011, 2013). Lastly, I should mention Lorenzo Natali's experiments with itinerant soliloquies as a visual and

⁵¹ The title of this dissertation thesis deliberately takes inspiration from this work.

⁵² Transurbance is a walking practice further developed by the collective STALKER/Osservatorio Nomade, an international urban art project founded in 1995 and initiated by the architect, researcher and artist Francesco Careri.

sensory device for comprehending environmental crimes and harms (2018).⁵³

The growth of non-representational (Vannini 2015) and transmaterial methodologies (Springgay and Truman 2017) have pushed further the analysis of how the encounter with the tangible and intangible materialities of living environments (i.e. affects, atmospheres, feelings, inanimate objects, living matter, technologies) can alter human thinking while being in movement (Pink and Sumartojo 2018; Edensor 2017; Kazig et al. 2017; Simpson 2017; Edensor and Lorimer 2015, Larsen 2014; Bissell 2010; Laurier et al. 2008; Sheller 2004). On the one hand, these contributions have been fundamental in encouraging emplaced and multi-modal research on walking. On the other hand, social scientists have stressed the importance of not reducing pedestrian experience to a normalised practice and universalised solution for supposed socially ‘inclusive’ or ‘good’ design practices. Springgay and Truman (2017) draw extensively on the Walking Lab’s research events to examine walking in relation to settler colonialism, affective labour, racial geographies, environmental education and collaborative writing; through these they promote a political mode of walking that engenders accountability and responsibility. Drawing on Jamie Coates’ (2017) critical reinterpretation of the *flâneur* in ethnographic research, the authors go on to highlight how the walker/*flâneur*, “a man of leisure, who is able to walk, detached and privileged in a city” (2017, 51), can be a problematic figure of mobility in contemporary qualitative research and in walking methodologies, when this figure doesn’t question the very grounds of any axes of difference (race, gender, class, sexuality, ability) and the resulting power relations.

In the following paragraphs I will take a closer look at the practice of walking as a means of building a collaborative laboratory of environmental change. From this perspective, walking represents a transformative practice of engaging with the elusiveness that characterises processes of ruination in urban settlements; as we have seen, Michelotti and Stura Park have experienced forms of neglect and destruction as a result of these ruination processes. By documenting the political ecology of atmospheres that tightly interlace human subjectivities, the biophysical and the social in Turin’s riverbank area, walking has helped me in my attempts to formulate a different language through which to capture the tenacious effects of processes of ruination and territorial stigma; it also allowed me to engender a sensitivity to the politics of knowledge production, particularly in relation to multi-species life experience, and the landscapes and subjectivities that are created in the Anthropocene.

IT IS SOLVED BY WALKING

⁵³ At the same time, though, walking – as Ingold and Vergunst (2008) suggest – was already a common topic of study in the ethnographic literatures of the twentieth century. See, for example, the works of Marcel Mauss, Pierre Bourdieu and Clifford Gertz. Other examples of ethnographic accounts on walking, albeit more broad in outlook, include William Foot White’s *Street Corner Society* (1943), Jane Jacobs’s *The Life and Death of Great American Cities* (1961) and Elijah Anderson’s *Streetwise* (1991).

Qualitative researchers have recently made explicit the role of movement in the comprehensive understanding of the environment we live in, and of the formation of subjectivities. Research on atmospheres has certainly pushed forward the development of this subject of study, in order to pinpoint how atmospheric scapes are made by way of multiple experiences of movement, and how the temporal and spatial configuration in which atmospheres are constituted also affects the body's ability to move. As Kazig et al. remind us, "mobility is the *sine qua non* condition of the atmosphere" (2016, 10). In the same vein, Pink and Sumartojo write that "we might see atmospheres as being constituted, at least in part, through the movement...of tangible and intangible materialities". But they also add that "movement enables people to label atmospheres, making them momentarily tangible" (2018, 75). The immersive experiences of the Stura and Michelotti have prepared the ground for an observation of the way the sensory and mobile configurations of material traces, people and biophysical elements, and also the circulation of feelings and ideas, speak of different and interconnected degradation processes and environmental change. This happens through the amalgamation between the personal and the official, the sensory, affective, discursive and representational. Thinking with Ingold, we could argue that all these moving bodies, like traces, reflect "any enduring mark left in or on a solid surface by a continuous movement" (2010, 15). Nevertheless, empirical research on atmospheres and research on mobilities face important methodological challenges as to the understanding of the way the relationship between the individual and the sensual qualities of the surrounding environments is established, and changes over time. It remains difficult to precisely describe the relational qualities of atmospheres.

This section is about the craft of observations, about the relevance of the study of atmospheres for the researcher's personal experience, in terms of reflexive awareness, ethics and ways of knowing the relational and transmaterial configurations of experience. My aim has been to investigate, through the analytical concept of atmospheres, the interrelationship between temporality and material decay in the post-industrial riverbanks of Turin. The most basic question related to the fieldwork is then: "What, exactly, should be my object?" This would have meant 'going to the riverbanks' to carefully examine the very objects of ethnographic enquiry, and identifying the different nuances of accessibility to the research field sites. "You'll figure things out when you are there", I was told many times while preparing to go on fieldwork, and talking about my ethnographic experience with other researchers. The walking method and methodology act as a collector (via space and time) of ethnographic relations and auto-ethnographic narratives that have entailed both movement and fixity. I always organised my forays into the field with a varying degree of transitiveness and intransitiveness; although it always started at one point and ended at another, 'just wandering' along the riverbanks was a learning process, and a way to craft observations and methods 'on the go' (Ingold 2011). This, in turn, meant placing emergency and uncertainty at the heart of my

reflections on reflexivity and positionality.

Turin has been the base of my professional career and life for ten years. In this sense, doing ethnography at home and preparing to write a monograph offered new perspectives on a city I assumed I in partly already knew. It also raised many concerns about the most basic thoughts on what an ethnographer does: the ‘being there’ over time (Atkinson 2014; O’Reilly 2012), the multi-situatedness of ethnographic experience (Hannerz 2003; Katz 1994), and all the worries about proximity and distance, relating to the formation of (ethnographic) knowledge as a contextually and intersubjectively constructed process (Haraway 1988; Ahmed 2002). One must be careful to assume that there can be a ‘good natural access’ in the practice of at-home ethnography. The ‘field’ is, rather, an effect of the work that has to be done to get closer, to bring together or collect “particular others” (humans and nonhumans) into a relation of proximity and intimacy,⁵⁴ even if closeness (‘being with’) might also entail discomfort and anxiety. The choice of case studies was in part influenced by my knowledge of the city, and by direct and indirect memories of the places. I didn’t go anywhere that was distinctively ‘elsewhere’, but I became acquainted with the sites of observation, in a way by walking, and to some extent also by chance. While my interest in Michelotti Park sprang from the participation in a walking event, as mentioned earlier, in the case of Stura Park it was the film *City Veins* that aroused my interest, after which I decided to do a walk. Before that, I remember catching no more than a glimpse of the riverbanks from a bridge.

Much of scholarly ethnographic work has been dogged by attempts to subsume scientific objects under natural entities delimited by social classification and spatial location. In the 1980s, the single-site research imaginary started to change, as multi-site fieldwork became increasingly practised and acknowledged (Marcus 1995; Falzon 2016). However, scholars have remained critical of the focus on multi-local fields, “as though life were lived at a scatter of fixed locales rather than along the highways and byways upon which they lie”, Vergunst and Ingold write (2008, 3). Similarly, Matthew Desmond points out that often “groups and places present themselves as natural entities for ethnographic exploration because they are the dominant categories of common thought, the stuff of journalism, art, television, much of sociology, and everyday conversation” (2014, 551). Conversely, as the anthropologist Ulf Hannerz (2003) suggests, following the network of relationships that surround field sites, both locally and translocally, can have insightful implications. My thoughts on reflexivity (i.e. the way my knowledge and actions shaped the research process) started from the very process of defamiliarising with the tendency to associate the sites of choice to bounded objects of analysis, and of looking at them as a “meshwork of relations” (Ingold 2011, 86), “places in process” (Desmond 2014, 553) or “hybrid geographies”; this meant studying “the *living*...spaces of social life configured by numerous, interconnected agents”

⁵⁴ Here I build on the work of the feminist writer and independent scholar Sarah Ahmed (2002, 560, 2000), and particularly on her understanding of collectivity in relation to feminist and post-colonial critiques of the ethics and politics of knowledge production and practice.

(Whatmore 2002, 339), while immersing in their ongoing and emergent configuration.

Drawing inspiration from Lancione and McFarlane's (2016) exercise of comparison, I gradually developed an "experimental approach" to comparison that was "retrospective and processual". Experimental, because one route is to examine two tracts of urban riverbank that have little in common, not simply because they are shaped by different urban histories and socio-ecological patterns of development, but also because they embody diverse spatial and social articulations of public and nature space, as well as different configurations of wasteland and marginal space. Moreover, the approach is experimental because the focus is not so much on bounded locations, but on the everyday making and undoing of processes of decay. The aim of the research was therefore not to examine how processes of abandonment worked in different contexts. It was only while conducting ethnographic fieldwork separately in the two spaces that correspondences, both similarities and differences, emerged throughout the endless and intertwined operations of observation, description and comparison. Reflexivity produced a kinesthetic and incremental process, as new insights developed, and opportunities came into sight. Comparing and learning from different cases of ruination processes also involved asking myself questions about different intersubjective experiences with my research interlocutors, about different ways of accessing and maintaining access to the field sites. Hence, learning from different cases was also part of the overall project, and a challenge, in that I had to engage with the 'messiness' of ethnographic practice and every day social worlds.

FINE-TUNING METHODS

I gradually became aware of the necessity to build a methodological toolkit that would combine different ethnographic techniques, and also interrogate the skills I had developed during previous ethnographic studies on urban green spaces.⁵⁵ This was the result of a rigorous process of theoretical examination, which has taken the

⁵⁵ The making of methods has articulated a combined process of unlearning and relearning; this meant confronting myself with the ethnographic methods that had worked best in my previous research, on the interrelationship between neighbourhood-based green spaces and the politics of social mix (*politique de la mixité sociale*) in the French city of Villeurbanne (2009–2010). Following the work of the anthropologist Setha Low (2017, 2009, 2000), on the politics of public spaces and culture, I initially formulated my research project as an interpretative study of the uses and meanings of diversity in the daily use of environmental amenities, and how these became embedded in physical space. While acknowledging this rich field of research, I have since then progressively developed a model of space and place in which humans are an integral, but not a privileged, element, and where landscape is observed beyond its semiotic and representational dimensions to include embodied, emplaced, pre-reflexive and sensory engagements with the landscape (Pink 2015; Waterton 2013; MacPherson 2010).

form of a continuous interaction between scholarly theories and my active, and practical, engagement with the sites of observation. More than a formal palette of methods, the combination of walking methods and other qualitative research techniques was integral to my situated experience as a researcher, through which I was learning how to conduct ethnographic research on processes of ruination, beyond the logics of public discourses and cultural meanings. The making of methods required an open-minded approach to the research process, which was incremental and transversal, and which encompassed time, not in its linear nature but as an opportune moment, a chance timing. Over the course of the fieldwork, the transformation of chance encounters into close “transmaterial” engagements (Springgay and Truman 2017) with moving bodies and space helped me in my attempts to build what Adey et al., drawing on the work of Tim Ingold (2007), have named the *wayfarer* disposition of the atmosphere researcher, “actively threading a way through and adapting to the environments being researched” (2013, 303). The anthropologist Leonardo Piasère (2006) speaks of the “imperfect ethnographer” when he examines the process of ethnographic knowledge as an “experiment of experience” carried out by the ethnographer, which always influences the shaping of observational procedures and ethnographic texts.

Experimenting with methods understood as ‘paths by which’ to make atmosphere more tangible meant embracing uncertainty as part of the research process, and reflexive accounts as means of reporting this uncertainty. Andrea Brighenti, with regard to the relationship between ethnography and the senses, says that the craftwork of qualitative research cannot be uncoupled from a “coefficient of impropriety” (2016, 8). I often arrived on the field without knowing what exactly to expect that day, how to collect notes on the move, how to identify general rules for the collection of materials. This often led to a feeling of discomfort and anxiety during the fieldwork, for example about where things might get to (and some did not get to anything at all), especially as I left the field and started thinking about what I had ultimately collected. During the research process, I also analysed media coverage and other sources (e.g. historical archives, maps, municipal agency reports, non-profit and grassroots organisations’ reports and memos). I did so with the aim of analysing ruination processes by looking at events located in the past, even when this might be the immediate past, and in order to study retrospectively the collective feelings about Turin’s post-industrial riverbanks. I also conducted pilot, sit-down interviews with institutional actors (Tab. 6.6), with a view to understanding the institutional framing of riverbank spaces, and the extent to which the approach underlying the local system of open space design is instantiated within the context of planning interventions. This kind of reading became a means of threading my way through texts in order to research the conditions that allowed abandonment and ruination, their potential effects and impacts, and what they could make possible. In the following sub-paragraphs I offer a summary of the adopted techniques. Each section scrutinises the empirical context that led to their consolidation and reformulation over the course of the research.

FIELDNOTING AS A TANGLE OF PATHS

Note-taking with pen and paper is one of the guiding precepts of ethnographic research, and many method textbooks have tried to tell would-be-fieldworkers ‘how to do it’ in terms of steps and procedures. At the same time, however, Nigel Rapport reminds us that “writing fieldnotes means operating within a variety of conventional frameworks of sense-making, juggling these in situational usage and personalising them to particular individual purpose” (1991, 13). Emerson et al. add, in the opening chapter of *Writing Ethnographic Fieldnotes*, that “there is no correct way to write about what one observes” (2011, 6). The popularity of digital technologies (smartphones and notebooks) and communication platforms (social networking apps and blogs) has made the fieldnote ecosystem even more complex, and the practice of ethnography supposedly more open and collaborative (Wang 2012). During my fieldwork, and especially in its early stages, I have struggled to identify the most suitable note-taking method. Occasionally I typed notes on my smartphone, using the default note app, in order to transcribe urgent, hurried and abbreviated jottings about particular sensory events, emotional states and reflexive thoughts; these would help me remember things and recreate the observational context when writing more in-depth fieldnotes in a post-fieldwork stage of my research. The note app also allowed me to upload photos and note down important details about the exact moment it was taken. Use of the smartphone has facilitated my bodily engagement *in* and *with* the field, because it sometimes made my presence less intrusive to daily users and residents.

I never decided which digital technology I would be using before embarking on fieldwork; instead, my interaction with the sites and interlocutors led to my placing the smartphone at the centre of my discussion about ethnographic practice, and the related practical and ethical concerns. Context has been the primary determinant of the appropriateness and role of such technology. Nevertheless, I have never been completely comfortable using the smartphone. I often noticed park-goers looking at me suspiciously, for example, if I was taking many photos, and I always had to check how much battery I had left; if the battery ran out I would have to interrupt my observations in order to take the portable battery device out of my backpack. For all these reasons, the blankness of the first page of my notepad often made me feel better. At the very beginning, a small notepad offered the most comfortable solution, as I could put it easily in my pocket. Later, I started using a medium size notepad, so that I would have more space for writing. At Michelotti Park, I regularly met the curious’ eyes of park-goers while sitting on the bench and writing. Conversely, due to the lack of urban furniture (especially benches) at Stura Park, I only managed to write down notes when I took a break in the adjacent bars. In addition, due to the long distances separating the fieldwork sites, the bicycle was my principle means of transportation. The bicycle basket helped me carry the backpack, where I stored my ‘toolkit’, including an analog camera, voice recorder and, of course, a raincoat. These technological devices not only mediated my encounter with the riverbanks, but they

gradually became my “prosthetic devices” and “visualization technologies”(Haraway 1988), as I made use of them for the purpose of participant observation, accumulating records and meeting interlocutors. They allowed for a processual way of ‘seeing’, and marked the beginning of a long process of detailed transcription and description, activities that I mainly conducted from my home desk, as quickly as possible in order not to forget anything.

Progressively my fieldwork diary was made up of a number of sketches, alongside texts that I analysed in juxtaposition with digital texts, images and voice recordings. All these forms of scientific visualisation and imagination implied a work with images that is representational in at least two ways: firstly, the ways in which images unravel fragments of perceptive experiences; secondly, the ways in which they reveal fleeting accounts of the social world and of spatial practice. The software MAXQDA, for qualitative data analysis, helped me work with different data sets (interviews, web pages, images, audio and video files), and to use a code system in order to organise my material in groups. This method was particularly useful in identifying the thematic categories that I adopted to develop my findings in chapters 3, 4 and 5. I have used a multi-stage process of categorising and coding data. In the first stage of analysis, different data sets were coded along approximate, major categories, which I derived primarily from the general themes that emerged from the data collection. In the next phase, I further developed the categories based on the data. Table X presents the main family codes, with a detailed description. Thematic categories, however, weren’t always constructed inductively, based on the recurrence of specific themes and ecological components – namely soil, water, light and air – in the accounts of the people I encountered, and in my experience of the performed walks. The categories were also constructed deductively, based on the recurrence of research topics that underly atmosphere studies. Examples include Timothy Choy’s (2010, 2011) ethnographic study on air quality as a political concern, Tim Edensor’s (2017) work on light, and Gastón Gordillo’s (2018) reflection on the power of terrain. Additional sources include cross-disciplinary investigations on the spectacularisation of water in the creation of the waterfront atmosphere (Desfor et al. 2011), as well as Sultana’s (2011) work on the emotional geographies of water access.

ETHNOGRAPHIC DOODLING, SKETCHING AND DRAWING

The use of visual components (especially photographs and films), as ways of collecting data at an individual level and as a collaborative practice, started to gain considerable academic attention from the 1980s onwards, as a result of the theoretical impulses of postmodernism, but also of radical and feminist post-colonial criticism in the humanities and social sciences. The latter took the intersubjective, relational and contextual dimensions of epistemological discussions about the study of social phenomena and the construction of theory to centre stage. The French

filmmaker and anthropologist Jean Rouch is widely considered a precursor of the idea of a shared anthropology, anticipating the future development of visual participatory approaches in qualitative social research (Pennacini 2005). However, it is only since the 2000s, under the influence of the ‘practice’ (Knorr-Cetina et al. 2001) and ‘sensorial’ turns (Howes 2003), that filming and photographing have become integral to many academic disciplines in the theoretical investigation of socio-cultural transformations (Frisina 2013). Key figures in this field include the British geographer Gillian Rose (2016) and Sarah Pink, the design anthropologist widely referenced for the dissemination of multidisciplinary, visual participatory methodologies (2013, 2006).⁵⁶

Nevertheless, as Azevedo and Ramos point out (2016, 138), there is a need to distinguish ‘ethnographic drawing’ from the traditional category of visual qualitative research, which is mainly associated with films and photography. The authors go on to suggest that visual and graphic recording techniques, such as sketchbooks taking shape during fieldwork, illustrations presenting anthropological materials and drawings used in collaborative research approaches, have often been sidelined by other visual practices, and still constitute a questionable category in academic discourse, notwithstanding the growth of the field in recent years. Reflections on drawing – viewed as a tool for ethnographic knowing and thinking – by the ethnographer include Andrew Causey’s (2017) book on drawing as an ethnographic method; Karina Kuschnir’s (2016) reflections on the use of sketches in anthropological fieldwork; Geismar’s (2014) analysis of the fieldwork sketches of Bernard Deacon; Michael Taussig’s *I swear I saw it* (2011); and, finally, Colloredo-Mansfeld’s *The Value of Sketching in Field Research* (1993).

I began considering and feeling inspired by the potential of drawing while confronted with feelings of frustration and boredom, as every page that I handwrote on the notepad seemed to downplay or erase the intensity of encounters, scenes and stories that I wanted to jot quickly before forgetting them. My primary effort was to communicate through drawings the intensities of what I experienced. Over time, this practice contributed to rediscover my ability to draw, just as writing requires skills and training. Drawings, sketches and doodles were constituent of the reflexive discourse related to the research. They became integral to the process of mapping and writing, as ways of evoking my immersive experience in the contexts of observation and describing what I chanced upon during my tours, primarily in terms of material objects and activities: where I go, who I meet, what I see, what I do, how I move from one place to another, the time of day and the temporality of actions.

AUTOETHNOGRAPHIC SOLO WALKS

The stigma of the two riverside spaces strongly impacted on the rather low attendance of visitors to the Stura and Michelotti, albeit in different ways. The

⁵⁶ Other important references include Spencer (2011), Banks (2007) and Van Leeuwen and Jewitt (2000).

common perception that both the edges of the Stura and the ruins of the former zoo are unsafe zones, to a certain extent impacted on my sensual disposition towards the environments of my research. Autoethnographic solo walks became a means of exploring how the shaping of space influenced personal feelings of unease, which blocked me in my attempts to enter places I had never visited. Also, solo walks made me increasingly aware of the emotional labour of gaining and maintaining access to the field, and how this process influenced my perception of negative atmospheric qualities. Emotional reflexivity is important for qualitative research, especially while doing qualitative research on atmospheres. Every walk therefore helped me to prepare the next walk, and to outline the future of ethnographic observations, which in turn helped me to gain self-confidence inwards, and trust outwards. Beyond the specific destination and duration of the pedestrian experience, the “felt mobility” (Kazig et al. 2017, 17) was at the centre of my analysis, especially while conducting fieldwork in rather lonesome areas (during certain times of the day or in particular seasons), or in areas perceived as masculine spaces because men, rather than women, would congregate in these areas.

Whenever I felt uneasy about moving on foot, meetings with park-goers whom I already knew helped me to carefully manage this experience. I have always invited my research informants to join me on my walks during night tours; this involves a constant renegotiation of the researcher’s identity, especially when closeness becomes a method within ethnographic enquiry, adding meanings and challenges to the project. At the same time, being a female researcher in rather masculine spaces also required that I developed practical strategies to manage this situation. The municipal gardens of the Arrivore became a ‘safer’ space when Carlo, one of the gardeners, gave me the key that allowed me to get access whenever I wanted to talk with other gardeners, or simply to rest. At the Lungo Stura, walking through allotments required some preparation, and mentioning the names of Fabiano and Luigi (mentioned in chapter four) served as a sort of ‘informal pass’ to comfortably visit the allotments. One day, though, they asked me not to use their names any longer; they didn’t want to put themselves at risk by virtue of the fact that they were in contact with a person associated with an institution. This tacit mistrust made the site less easily accessible in the following forays, influencing my ability to move through the allotments as I perceived that social conflict at the allotments of the Lungo Stura was growing. Continuing my walks alone, I learnt that field access was a never-ending process. Negotiating access to the field took place in a dimension always connected with the atmospheric qualities of environments, and the manners through which I perceived them.

At one point, going into the field or meeting my research interlocutors was not possible, a situation which challenged the key aspects of my ethnographic practice, namely ‘the being there’ and the ‘being with’. In September 2017, the enforcement of security measures at Michelotti Park limited my access to the former zoo area for a long period. During my fieldwork, I mainly talked to the people – especially dog walkers – who used to define themselves the janitors (or watchdogs) of a “dorky park”. At the very beginning of my field trips at Stura Park, I spent many days not

speaking to anyone. Anxiety about not being able to capture the fleeting realities of everyday life aroused. Over time, though, my awareness of the importance of silence as an active presence of social reality grew, encouraging me to no longer see silences as suspicious, and to explore – through a different sensibility – the narrative forms that silence can take, in the phenomenological study of landscape or in the encounter with research interlocutors. Sometimes, as researchers, we want to ‘force’ reality ‘to act’ in a certain way according to our research interests, whereas we should also learn to challenge our assumptions about, or understanding of, social realities, and learn how to attune to them. It is important to stress that walking is not just a means to access the field. The appropriateness of the walking method primarily relates to the possibility of multiplying social, material, political and sensorial encounters, and through that the possibility of expanding the registers for understanding urban processes.

I have organised additional walks where I focused on the sounds of the surroundings (Feld 2012; Feld and Basso 1996), during which I would hold a voice recorder; I also explored the uncertain spatial dimensions of atmospheres through ‘acoustic transitions’. As Gandy suggests, “the complexity of urban soundscapes exemplifies the spatial porosity of atmospheres and the uncertain distinction between what constitutes ‘inside’ and ‘outside’” (2018, 358). In the following excerpt, for example, I describe my early impressions of how it felt to move from Arrivore Park to the adjacent woods through differential configurations of acoustic transitions:

The thing I really notice about Stura Park, especially when you arrive from Arrivore Park, is that you enter a bubble, a sort of ‘intimate’ zone which becomes more ghostly with every step towards the ruined tower. I really feel other-than-human forms of life coming in. The trail becomes more irregular, sand deep. The high quality voice- recording device makes the transition more nuanced, but when walking in silence it’s just as sharp.

In this sense, the use of audio materials was itself a means by which I could learn about the sensory characteristics of the site and overcome a too linguistic approach to observed phenomena.

ITINERANT DIALOGUES

Walking interviews with research interlocutors provided an opportunity to further confront one another on sound transitions, in order to interpret different experiences and values associated with sounds. The experience of “entering a bubble” was perceived as a form of liberation from sounds that are annoying, generating, instead, a sense of calm and relax. At the same time, it also created a form of stress and anxiety, mainly associated with feelings of isolation that became more threatening exactly because they were part of an urban background; they show that emotions in relation to open spaces are informed by cultural beliefs and tastes of nature.

Ethnographic encounters were also important to reflect on the way I negotiated my bodily presence with research interlocutors, who often mistook me for a journalist or a police officer operating in plain clothes. Ethnographic encounters are never straightforward in public spaces. Sometimes people were enthusiastic about my project, and invited me to join them on their daily walk. In other instances, they looked at me with suspicion when I first approached them, and it was only after I introduced myself that they relaxed and opened up. Reactions were quite varied. Whenever I started to explain my project, I was always asked for a survey or a list of questions. Occasionally, I was also asked to write a report for local media or city officials, especially with regard to the park's maintenance. One of the major difficulties in almost every informal encounter with park-goers was that of explaining that I wasn't using surveys, that I wasn't a journalist or "someone from the city council", and that my research required a lot more detail and exchanges than structured interviews and written interview questions could provide. Repeated visits at the riverbanks ensured that my presence was felt and lived as being 'close', sometimes even 'wanted'.

Whereas 'informal go-alongs' consisted of impromptu encounters with open space-goers, more structured 'walking conversations' were organised along both predefined and spontaneous paths. The latter only occurred in the final stages of the fieldwork, and involved interlocutors with whom I had developed strong relationships of trust. Setting up more structured walking conversations wasn't important in terms of sample size, but it was a means of building deeper, thicker and richer insights that I could generate only from repeated encounters, empathic relations and immersive experiences in the research field site. In other words, the interview was the result of relationships of trust, a more-than-human socialisation with the inhabitants of the post-industrial riverbanks of Turin. I have not selected research participants based on a pre-established set of criteria such as sex, age, education and so on. When choosing interviewees among open space-goers, the everyday or occasional use of the place was the primary criterion. My position as a white, female, middle-class researcher was, in fact, a major concern I had to contend with. At Stura Park, in particular, encounters with Romas and other migrants were occasional and intermittent, and attempts to have discussions with them did not result in any significant success. Building trust requires an additional effort when meeting vulnerable minority populations, due to the assumptions I was bringing into the field. Despite my repeated and sustained visits to the park, I wasn't always able to overcome these. I also tried to contact local NGOs and grassroots associations, in order to meet migrants that used to live at the settlement of the Arrivore, but it was too complicated to reach them. In addition, a study of the relationship between vulnerable minority populations and environmental change at the Stura would perhaps have required, in terms of research methodology, a more specific focus on the experience of social and spatial marginality. This would, however, have necessitated a different set of research questions that would have taken me too far from the main thesis of my dissertation, which is, for instance, how enforced spatial segregation and racialisation do influence the concepts and categories that Romas use to describe the way they experience and feel environmental degradation.

Walking interviews, in fact, can be considered the result of a relationship-building process with interlocutors who spontaneously decided to cooperate for the purpose of my research. Improvised, unstructured interviews with everyday and occasional ramblers were a constituent part of my research method. A summary of walking interviews are presented in Tab. 6.1, 6.2, 6.3, and 6.4. I have used pseudonyms for some of my informants in order to protect their identity. Moreover, during interviews and casual conversations, it was very difficult to go beyond the moral and normative order created by ruination processes that might necessarily exclude certain practices, and the bodies associated with them. In this sense, the walking tour was helpful. The less the conversation was structured and static, the more space there was to understand how waste, neglect and wilderness have become negotiable categories over time. The practice of walking, and especially 'botanical walks', can help deconstruct the material, catalytic role of blight as a traditional pattern of both stigmatisation and redevelopment in processes of metropolitan change. Escape from urban life by walking into the non-human world of plants can offer an opportunity to construct an experience of sauntering, which provides the basis for a transfiguration of human thinking and, simultaneously, approaches other-than-human ecologies by "thinking without a head" (Vermeire 2018)⁵⁷. Nonetheless, as cultural and scientific forms of exploration, botanical walks have their own set of challenges. They can, for instance, encourage forms of "botanical tourism" (Myers 2015) and nostalgic spectacle, which might weaken the possibilities of redefining securitarian and normative politics of nature and public space, in marginal areas in particular. In this sense, the stories of Michelotti and Stura Park encourage ways of walking politically – and not voyeuristically – among the silent permanence of plants, by collecting material objects and observing processes of ruination, in order to track people's lives and social realities.

Repetition and insistence (i.e. coming back together and stop, walking slowly, taking the time to stop, listen and touch, etc.) enabled us to negotiate the social and moral dimensions associated with the park. Within the context of walking interviews, the interlocutors sometimes took photographs during the tour, and subsequently produced graphic representations of their normal itinerary. Once they sketched the itinerary, they were asked to describe in depth – verbally and by adding notes, such as symbols or words – what they encountered, smelled, felt, saw and remembered, and their points of reference, to a new visitor. This activity was accompanied by a discussion about the photographs that the interlocutors produced during the walking tour. The goal was to help elicit narratives and to deepen the knowledge of the lived experience, but it also contributed to create a correspondence between the interlocutors' narratives and my own impressions. However, this method didn't prove very efficient as it was extremely difficult to find a comfortable place to sit and draw, especially at Stura Park.

⁵⁷ Vermeire Simona, *Plant(e)escape* in Made of Walking (2018) <http://www.themilena.com/made-of-walking.html>

SIT-DOWN INTERVIEWS AND OTHER WALKING CONVERSATIONS

I have organised walking conversations with institutional actors, and these always happened in groups, with the participation of grassroots activists. This was particularly the case of the institutional walk-about organised at Michelotti Park, over the course of the participatory planning programme, at a time when the renovation of the park had already started. I have participated in official ‘go-alongs’ organised as part of institutional presentations of municipal initiatives, or during public visits to distinct sites of new open space projects. Examples include the walk at Dora Park organised as part of the international workshop on urban landscape in May 2017, and also the walk at ‘Laghetti Falchera’. Collective walks at Stura Park were mainly improvised, except for the weekly walks organised by the social centre ‘Coproma’, which existed before my research began. Other collective walks include the botanical walks at Stura Park in May 2018 and the anti-speciest walks at Michelotti Park. This experience provided an opportunity to re- and counter-map the riverbanks by adding oral histories and other non-official information. I have participated in public conferences organised by the Municipality, and also in meetings held by grassroots associations and community-based organisations that have, although in differing ways, urban green as a common concern. Interviews were conducted with the technical and administrative staff of the *Settore Grandi Opere del Verde*, Metropolitan City of Turin (formerly *Provincia di Torino*), and with other green space-related local agencies (e.g. the *Osservatorio del parco del Po e della collina torinese*), along with scholars from the Polytechnic School of Turin (see Tab. 6.6).

These actors have come to represent key actors, of varying degrees, in urban open space projects of the last decade. During the interviews, they attempted to outline a broad picture of the local system of open space planning, and how it has changed over time. The interviews with institutional actors have offered me insights into the institutional framing of the riverbank spaces in question, as well as into the political issues underlying local discussions on public open spaces, and how these are related to urban renewal initiatives. In this sense, the activities of the “Coordinamento del Verde” and the “Assemblea Michelotti”, two different networks formed by members of environmentalist associations and informal city dwellers, have provided me with additional opportunities to understand these problems and engage with potential key informants for my research.

Name	Age	Activity	Interview setting	Duration
Giacomo	38	Just walking, Daily parkgoer	Intvw realised while walking, completed at Giacomo's house	3hrs and 30 min
Manuela	33	Just walking, Daily parkgoer	Intvw realised while walking, completed at Manuela's house	3hrs
Matilde	28	Just walking, Occasional parkgoer	Intvw carried while walking	1hr
Viola	36	Former parkgoer	Intvw realised while walking, carrying the stroller	2 hrs
Ambra	40	Dog-walker, Daily parkgoer	Intvw realised while walking	1hr
Susanna	44	Dog-walker, Daily parkgoer	Intvw realised while walking her dog	1hr and 30 min
Annalisa	80	Dog-walker, Daily parkgoer	Intvw carried while walking her dog, completed at Annalisa's house	2 hrs
Angela	75	Former park's volunteer	Intvw carried while sitting on a bench in the central pomenade, then walking across the old zoo	1hr
Niccolò	25	Just walking, Daily parkgoer	Intvw realised near the Michelotti dam after Niccolò's trumpet rehearsal	1hr
Martina	45	Dog walking, Daily parkgoer	Intvw realised while walking	3hrs
Chiara	35	Dog-walking, Daily parkgoer	Intvw realised while walking	2hrs

TABLE 6.1 – Description of walking interviews realised at Michelotti Park (part 1)

Name	Route	Thematic summary of the interview
Giacomo	From the central promenade to Fausto Coppi Garden and then along the opposite bank of the Po River and back to Michelotti Park	Daily use, photography, trees, spontaneous vegetation, fear for change, interaction with the river, city's rivers
Manuela	From the central promenade to Fausto Coppi Garden and then along the opposite bank of the Po River and back to Michelotti Park	First interaction with MP, perception of the neighbourhood, privatisation of the park, river therapy
Matilde	The path alongside the Po River	First interaction with MP, relations between people and weeds, historic riverfront, privatisation of the park, memories, river's fauna
Viola	From Fausto Coppi Garden to Michelotti Park and back again	First interaction with MP, memories, pessimism about MP, optimism about the area, felt security, desire of change
Ambra	From Michelotti Park to Fausto Coppi Garden	First interaction with MP, places and memories, the importance of spontaneous vegetation, urban exploration
Susanna	From the municipal library to Victor Emmanuel I Bridge and back again	Daily use, perception of the neighbourhood, connection to the river, autobiography, city parks
Annalisa	From the central promenade to the path alongside the river and back again	People living in the old zoo, inadequate park maintenance, memories of the old zoo, dog daycare
Angela	From the central promenade to the old zoo using the old metal fence gate	Places and memories, volunteering service, mayoral and city officials attitudes to MP, park maintenance
Niccolò	The path alongside the river	First interaction with MP, daily use, fear of change, urban exploration
Martina	From the Piola to Michelotti and then to sassi Bridge and back again to Michelotti Park	Childhood, first interaction with MP, places and memories, park revitalisation, walking, relations between people and dogs, city parks, life choices
Chiara	The path alongside the Po river, from Victor Emmanuel I Bridge to Regina Margherita Bridge	First interaction with MP, rehabilitation process, memories, police patrols

TABLE 6.2 – Description of walking interviews realised at Michelotti Park (part 2)

Name	Age	Activity	Interview setting	Duration
Marianna	55	Dog-walking, Daily parkgoer	Intvw realised while walking her dog	1hr and 30min
Roberto	69	Dog-walking, Daily parkgoer	Intvw carried while walking his dog	2hrs
Piero	68	Just walking, Daily parkgoer	Intvw realised while walking	3hrs
Mara	66	Just walking, Occasional parkgoer	Intvw carried while walking	3hrs
Simone	60	Just walking, Occasional parkgoer	Intvw realised while walking	2hrs and 30min
Melissa	61	Just walking, Occasional parkgoer	Intvw realised while walking	3hrs
Clara	59	Just walking, Daily parkgoer	Intvw carried while walking	2hrs and 30min
Fabrizio	61	Just walking, Daily parkgoer	Intvw realised while walking	2hrs and 30min
Pietro	45	Dog-owner with disability, Daily parkgoer	Intvw realised within the dog are, completed at Pietro's house	3hrs
Francesca	29	Dog-walking, Daily parkgoer	Intvw carried while sitting on a bench of the dog area	1hr
Alessandro	65	Just walking, Occasional parkgoer	Intvw carried while waking	2hrs
Walter	43	Playing with children, Regular parkgoer	Intvw carried while walking	2hrs
Tommaso	79	Urban foraging, Regular parkgoer	Intvw carried in a car, then while walking	2hrs
Cinzia	50	Dog walking, Daily parkgoer	Intvw realised while walking her dog	1hr and 30min

TABLE 6.3 – Description of walking interviews realised at Stura Park (part 1)

Name	Route	Thematic summary of the interview
Marianna	The path alongside the Stura River at Stura North	Daily use, first interaction with SP, park maintenance, barbecuing, Roma people, accessibility, dowsing/suffering for water
Roberto	From Stura North to the opposite bank and back again	Daily use, park revitalisation, places and memories, wildlife, trees, barbecuing, park maintenance, water management, Roma people
Piero	From Arrivore Park to Stura North	Places and memories, childhood, park revitalisation, allotment gardens, stray dogs, autobiography, life choices
Mara	From Stura North to the sand extraction site and back again	First contact with SP, weeds, urban foraging, life choices, city management of Roma camps, industrial ruins
Simone	From Arrivore Park to 'Lungo Stura Lazio' alongside the bicycle path	Childhood, places and memories, park revitalisation, future opportunities, SP vs. other city parks, mobility, feelings of insecurity, unmowed lawns
Melissa	From Arrivore Park to Stura South and back again	First interaction with SP, weeds, connection to the river, park maintenance, industrial ruins, walking
Clara	From Arrivore Park to Stura South and back again	Places and memories, first interaction with SP, park revitalisation and accessibility, feelings of insecurity, park vs. spontaneous vegetation
Fabrizio	From Arrivore Park to Stura South and back again	First interaction with SP, wildlife preservation, neighbourhood activism, optimism about SP, park maintenance, mayoral attitudes to watershed management
Pietro	From the dog area to Pietro's house using his car	First interaction with Arrivore Park, park's accessibility and revitalisation, inadequate maintenance, optimism about the area
Francesca	From Arrivore Park to the dog area	Park maintenance, daily use, feelings of insecurity, daily dog care, pessimism about the area
Alessandro	From Amedeo VII Bridge to the municipal allotment gardens and then back to Arrivore Park	Childhood, neighbourhood activism, Roma camps, uncivic behaviour, blight, water management
Walter	From the playground of Arrivore Park to the municipal allotment gardens and back again	Places and memories, first interaction with SP, marginal natures, herons, autobiography
Tommaso	From Arrivore Park to the municipal allotment gardens and back again	Places and memories, urban foraging, industrial ruins, agricultural past
Cinzia	From Stura North to the opposite bank and back again	First contact with SP, waste, neighbourhood change, park maintenance, uncivic behaviour, Toxic Park, barbecuing, connection to the river, felt security

TABLE 6.4 – Description of walking interviews realised at Stura Park (part 2)

Main family codes	Definition
Non-human life	Relations between people, animals and plants
Edges' interfaces	Physical barriers (i.e. boards, different types of fences, signs, walls and plants in a row) and other boundary-marking processes (i.e. conflict, engagement, encroachment, exhibition, stewardship)
Socio-environmental change	Biophysical and hydrogeological changes, depollution and remediation, re-use, rehabilitation
Memory	Materials, architectural fabric and the physical remains, personal and public memories
Environmental perception	Aesthetic aspects of the environment, affective and bodily experience
Sociality	Social identities and cultural practices formed in the interaction of the environment

TABLE 6.5 – Thematic categories used in the coding process

Name	Affiliation
SI01	Green Space Department of the City of Turin
SI02	Green Space Department of the City of Turin
SI03	Activist, Former President of the "Ente Parco del Po" (Former Po Riverside Park)
SI04	Metropolitan City of Turin/Formar membre of the Green Space Department
SI05	Metropolitan City of Turin (River Contracts)
SI06	Director of the Po Park
SI07	Former chairman of the Environment Committee
SI08	Former president "Ente Parco del Po" (Former Po Riverside Park)
SI10	Biologist and Researcher at ENEA
SI11	Former Mayor of Turin
SI12	Polytechnic School of Turin - DIST
SI13	Polytechnic School of Turin - DIST
SI14	Polytechnic School of Turin - DIST
SI15	Polytechnic School of Turin - DIST
SI16	Polytechnic School of Turin - DAD
SI17	Polytechnic School of Turin - DAD
SI18	University of Turin - Culture, Politics and Society
SI19	Polytechnic School of Turin - DAD
SI20	Geisser Municipal Library
SI21	Architect, Assemblea Michelotti
SI22	Architect, Artist
SI23	Activist
SI24	Architect

TABLE 6.6 – Sit-down interviews

REFERENCES

- Adams, R. E. 2014. "Natura Urbans, Natura Urbanata: Ecological Urbanism, Circulation, and the Immunization of Nature." *Environment and Planning D: Society and Space* 32 (1): 12–29.
- Adey, P. 2009. *Mobility*. London: Routledge.
- Adey, P. D. Bissell, K. Hannam, P. Merriman, and M. Sheller eds., 2014. *The Routledge Handbook of Mobilities*. London and New York: Routledge.
- Adey, P. L. Brayer, D. Masson, P. Murphy, P. Simpson, and N. Tixier. 2013. "Pour Votre Tranquillité: Ambiance, Atmosphere, and Surveillance." *Geoforum* 49: 299–309.
- Adorni, D., M. D'Amuri, and D. Tabor. 2017. *La Casa Pubblica. Storia Dell'Istituto Autonomo Case Popolari Di Torino*. Roma: Viella.
- Ahmed, S. 2004. Collective feelings: Or, the impressions left by others. *Theory, Culture & Society* 21 (2): 25–42.
- Ahmed, S. 2011. "Happy Objects." In *The Affect Theory Reader*, edited by M. Gregg and G. J. Seigworth, 29–51. Durham and London: Duke University Press.
- Ahmed, S. 2002. "This Other and Other Others." *Economy and Society* 31 (4): 558–72.
- Alaimo, S. 2010. *Bodily Natures: Science, Environment, and the Material Self*. Bloomington: Indiana University Press.
- Alterazioni Video. 2017. *Incompiuto. The Birth of a Style*. Milano: Humboldt Books.
- Ambrosini, M. 2013. "We Are against a Multi-Ethnic Society': Policies of Exclusion at the Urban Level in Italy." *Ethnic and Racial Studies* 36 (1): 136–55.
- Amin, A. 1994. *Post-Fordism: A Reader*. London: Blackwell.
- Amin, A., and N. Thrift. 2002. *Cities: Reimagining the Urban*. Cambridge and Malen: Polity Press.
- Amin A., and N. Thrift 2016. *Seeing Like a City*. Cambridge: Polity Press.
- Anderson, B. 2009. "Affective Atmospheres." *Emotion, Space and Society* 2: 77–81.
- Anderson, B. 2014. *Encountering Affect*. London: Routledge.
- Anderson, B. 2009. "Affective Atmospheres." *Emotion, Space and Society* 2 (2): 77–81.
- Anderson, E. 1991. *Streetwise: Race, Class, and Change in an Urban Community*. Chicago: University of Chicago Press.
- Anguelovski, I., J. Connolly, and A. L. Brand. 2018. "From Landscapes of Utopia to the Margins of the Green Urban Life: For Whom Is the New Green City?" *City* 22 (3): 417–36.
- Arboleda, P. 2017. "Ruins of Modernity': The Critical Implications of Unfinished Public Works in Italy." *International Journal of Urban and Regional Research* 41 (5): 804–20.
- Ash, J. 2013. "Rethinking Affective Atmospheres: Technology, Perturbation and Space Times of the Non-Human." *Geoforum* 49: 20–28.
- Atkins, P. ed., 2013. *Animal Cities: Beastly Urban Histories*. Farnham: Ashgate Publishing Limited.
- Atkinson, P. 2014. *For Ethnography*. Thousand Oaks: Sage.
- Augoyard, J. F. 2007. *Step by Step: Everyday Walks in a French Urban Housing Project*. Minneapolis: University of Minnesota Press.

- Augoyard, J.F. 1995. "L'environnement sensible et les ambiances architecturales." *L'Espace Géographique* 4 (4): 302–18.
- Azevedo, A., and M. J. Ramos. 2016. "Drawing Close—On Visual Engagements in Fieldwork, Drawing Workshops and the Anthropological Imagination." *Visual Ethnography* 5 (1): 135–60.
- Badino, A. 2018. "Mondo Operaio e Disuguaglianze. Le Eredità Elle Migrazioni Interne." In *Torino. Un Profilo Etnografico*, edited by C. Capello and G. Semi, 223–46. Milano: Meltemi.
- Bagliani, F. 2008. "Progetti in Corso." In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. M. Lupo, and S. Poletto, 109–16. Torino: Celid.
- Bagliani, F. 2008. "Parchi e Alberate Nelle Politiche Municipali." In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, edited by Paolo Cornaglia, Giovanni Maria Lupo, and Sandra Poletto. Torino: Celid.
- Bagnasco, A., and C. Olmo. 2008. *Torino 011. Biografia Di Una Città*. Milano: Mondadori Electa.
- Bagnasco, A. 1988. "Torino: La Città e La Fabbrica." *Spazio e Società* 42: 84–87.
- Bagnasco, A. 1986. *Torino. Un Profilo Sociologico*. Torino. Einaudi.
- Banks, M. 2007. *Using Visual Data in Qualitative Research*. Los Angeles: Sage.
- Barad, K. 2011. "Nature's Queer Performativity." *Qui Parle: Critical Humanities and Social Sciences* 19 (1): 121–58.
- Basso, K. H., and S. Feld eds., 1996. *Senses of Place*. Santa Fe: School of American Research Press.
- Bastian, M. 2014. "Time and Community: A Scoping Study." *Time and Society* 23 (2): 137–66.
- Bastian, M. 2011. "The Contradictory Simultaneity of Being with Others: Exploring Concepts of Time and Community in the Work of Gloria Anzaldúa." *Feminist Review* 97: 151–67.
- Belligni, S., and S. Ravazzi. 2012. *La Politica e la città: regime urbano e classe dirigente a Torino*. Bologna: Il Mulino.
- Benedict, M. A., and E. T. McMahon. 2006. *Green Infrastructure. Linking Landscapes and Communities*. Washington, DC: Island Press.
- Benente, M. 2008. "Aree Verdi e Sponde Fluviali: Analisi e Definizione Di Sistemi Complessi." In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. Maria Lupo, and S. Poletto, 127–34. Torino: Celid.
- Benjamin, W. 1997. *Charles Baudelaire: A Lyric Poet in the Era of High Capitalism*. London: Verso Books.
- Bennett, J. 2009. *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press.
- Bergamo, S., G. Parisi, and P. Jarre. 2018. "Drugs and Alcohol Today Harm Reduction in Italy: The Experience of an Unsanctioned Supervised Injection Facility Run by Drug Users Article Information." *Emerald Publishing Limited*.
- Bertellini, G. 2012. "The Earth Still Trembles: On Landscape Views in Contemporary Italian Cinema." *Italian Culture* 30 (1): 38–50.
- Bianchetti, C. 2008. *Urbanistica e Sfera Pubblica*. Roma: Donzelli.
- Bianchetti, C. 2011. "Spina 3 e i Paradossi Della Politica Urbana." In *Torino 011 Biografia Di Una Città*, edited by A. Bagnasco and C. Olmo, 47–53. Electa.
- Bianchetti, C. 2016. *Spazi Che Contano. Il Progetto Urbanistico in Epoca Neoliberale*. Milano: Donzelli Editore.
- Bille, M., P. Bjerregaard, and T. Flohr Sørensen. 2015. "Staging Atmospheres: Materiality, Culture, and the Texture of the in-Between." *Emotion, Space and Society* 15: 31–38.

- Birth, K. 2014. "Non-Clocklike Features of Psychological Timing and Alternatives to the Clock Metaphor." *Timing & Time Perception* 2 (3): 312–24.
- Bissell, D. 2010. "Passenger Mobilities: Affective Atmospheres and the Sociality of Public Transport." *Environment and Planning D: Society and Space* 28 (2): 270–89.
- Bissell, D. 2018. *Transit Life: How Commuting Is Transforming Our Cities*. Cambridge: MIT Press.
- Bissell, W. C. 2016. "Design and Temporality: Provocation." *Cultural Anthropology*.
- Bjerregaard, P. 2015. "Dissolving Objects: Museums, Atmosphere and the Creation of Presence." *Emotion, Space and Society* 15: 74–81.
- Blomley, N. 2016. "The Territory of Property." *Human Geography* 40 (5): 593–609.
- Böhme, G. 2016. *Critique of Aesthetic Capitalism*. Milano: Mimesis Edizioni.
- Böhme, G. 2010. *Atmosfera, Estasi, Messe in Scena. L'estetica Come Teoria Generale Della Percezione*. Milano: Marinotti Edizioni.
- Böhme, G. 1993. "Atmosphere as the Fundamental Concept of a New Aesthetics." *Thesis Eleven* 36 (1): 113–26.
- Bracco, G. ed., 1988. *Acque, Ruote e Mulini a Torino*. Torino: Archivio storico.
- Braidotti, R. 2011. *Nomadic Subjects Embodiment and Sexual Difference in Contemporary Feminist Theory*. New York: Columbia University Press.
- Braidotti, R. 2013. *The Posthuman*. Cambridge: Polity Press.
- Brantz, D. 2007. "The Natural Space of Modernity. A Transatlantic Perspective on (Urban) Environmental History." In *Historians and Nature. Comparative Approaches to Environmental History*, edited by Ursula Lehmkuhl and Hermann Wellenreuther. Oxford-New York: Berg.
- Brantz, D., and S. Dümpelmann eds., 2011. *Greening the City: Urban Landscapes in the Twentieth Century*. Charlottesville: University of Virginia Press.
- Braun, B. 2005. "Environmental Issues: Writing a More-than-Human Urban Geography." *Progress in Human Geography* 29 (5): 635–50.
- Brennan, T. 2004. *The Transmission of Affect*. Ithaca: Cornell University Press.
- Brenner, N., and R. Keil. eds., 2006. *The Global Cities Reader*. London and New York: Psychology Press.
- Brighenti, A. M. ed., 2016. *Etnografia e i Sensi*. Etnografia e ricerca qualitativa.
- Brighenti, A. M. ed., 2013. *Urban Interstices: The Aesthetics and Politics of the In-Between*. Farnham: Ashgate.
- Brighenti, A. M. 2010. "Lines , Barred Lines . Movement , Territory and the Law." *International Journal of Law in Context* 6 (3): 217–27.
- Brighenti, A. M. 2008. "Visual, Visible, Ethnographic." *Etnografia e Ricerca Qualitativa*, 1: 1–30.
- Brighenti, A. M. 2018. "The Vegetative City." *Culture, Theory and Critique*, 1–17.
- Brighenti, A. M., and M. Karrholm. n.d. *Animated Land. Studies in Territoriality*. Forthcoming.
- Brighenti, A. M., and C. Mattiucci. 2012. "Visualising the Riverbank." *City*, 16 (1-2): 221-234.
- Brighenti, A. M., and A. Pavoni. 2018. "Urban Animals—Domestic, Stray, and Wild: Notes from a Bear Repopulation Project in the Alps." *Society & Animals* 26 (6): 576–97.
- Brown, E., and T. Shortell, eds. 2016. *Walking in Cities. Quotidian Mobility as Urban Theory, Method and Practice*. Philadelphia: Temple University Press.
- Brown, E., and T. Shortell, eds. 2014. *Walking in the European City. Quotidian Mobility and Urban Ethnography*. London: Ashgate.

- Brownlow, A. 2006. "An Archaeology of Fear and Environmental Change in Philadelphia." *Geoforum* 37: 227–45.
- Bukowski, W. 2019. *La buona educazione degli oppressi. Piccola storia del decoro*. Roma: Alegre.
- Bunce, S., and G. Desfor. 2007. "Introduction to 'Political Ecologies of Urban Waterfront Transformations.'" *Cities* 24 (4): 251–58.
- Capello, C., and V. Porcellana. 2017. "Per Un'antropologia Della Povertà. Osservazioni Etnografiche a Torino." *SPAZIO FILOSOFICO* 20 (2): 287–98.
- Capello, C., and G. Semi. 2018. *Torino. Un Profilo Etnografico*. Milano: Meltemi.
- Careri, F. 2006. *Walkscapes. Camminare Come Pratica Estetica*. Torino: Piccola Biblioteca Einaudi.
- Cassatella, C. 2013. "The 'Corona Verde' Strategic Plan: An Integrated Vision for Protecting and Enhancing the Natural and Cultural Heritage." *Urban Research and Practice* 6 (2): 219–28.
- Castonguay, S., and M. Evenden eds., 2012. *Urban Rivers: Remaking Rivers, Cities, and Space in Europe and North America*. Edited by Stéphane Castonguay and Matthew Evenden. Pittsburgh: University of Pittsburgh Press.
- Castree, N., and B. Braun eds., 1998. *Remaking Reality: Nature at the Millenium*. Edited by Noel Castree and Bruce Braun. London and New York: Routledge.
- Causey, A. 2016. *Drawn to See: Drawing as an Ethnographic Method*. North York: University of Toronto Press.
- Certomà, C. 2011. "Critical Urban Gardening as a Post-Environmentalist Practice." *Local Environment* 16 (10): 977–87.
- Checker, M. 2011. "Wiped out by the 'Greenwave': Environmental Gentrification and the Paradoxical Politics of Urban Sustainability." *City & Society* 23 (2): 210–29.
- Choy, T. 2010. "Air's Substantiations." Paper for Berkeley Environmental Politics Colloquium. Available at: <http://globetrotter.berkeley.edu/bwep/colloquium/papers/ChoyAirEP.pdf>
- Choy, T. 2011. *Ecologies of Comparison: An Ethnography of Endangerment in Hong Kong*. Durham: Duke University Press.
- Citroni, S., and A. Pavoni. 2016. "An Ethnographic Approach to the Taking Place of the Event." In *Critical Event Studies: Approaches to Research*, edited by I. Lamond and L. Platt, 243–56. London: Palgrave MacMillan.
- Clark, N. T. ed., 2003. *The City as an Entertainment Machine*. New York: Lexington Books.
- Clark, N. 2000. "'Botanizing on the Asphalt'? The Complex Life of Cosmopolitan Bodies." *Body & Society* 6 (3–4): 12–33.
- Clark, P. ed., 2006. *The European City and Green Space: London, Stockholm, Helsinki and St. Petersburg, 1850-2000*. Aldershot: Ashgate Publishing.
- Clément G. 2013. *Elogio Delle Vagabonde. Erbe, Arbusti e Fiori Alla Conquista Del Mondo*. Rome: Derive e Approdi.
- Closs Stephens, A. 2016. "The Affective Atmospheres of Nationalism." *Cultural Geographies* 23 (2): 181–98.
- Coates, J. 2017. "Key Figure of Mobility: The Flâneur." *Social Anthropology* 25 (1): 28–41.
- Colloredo-Mansfeld, R. 1993. "The Value of Sketching in Field Research." *Anthropology UCLA*, 89–103.
- Colombino, A, and A. Vanolo. 2017. "Turin and Lingotto: Resilience, Forgetting and the Reinvention of Place." *European Planning Studies* 25 (1): 10–28.
- Cornaglia, P., G. M. Lupo, and S. Poletto eds., 2008. *Paesaggi Fluviali e Verde Urbano. Torino e l'Europa Tra Ottocento e Novecento*. Torino: Celid.

- Cosgrove, D. 2003. "Landscape: Ecology and Semiosis." *Landscape Interfaces*, 15–20.
- Costa, G., M. Stroschia, N. Zengarini, and M. Demaria eds., 2017. *40 Di Salute a Torino. Spunti per Leggere i Bisogni e i Risultati Delle Politiche*. Torino: Inferenze Edizioni.
- Cresswell, T. 2006. *On the Move. Mobility in the Modern Western World*. New York: Routledge.
- Cresswell, T, and P. Merriman, eds., 2011. *Geographies of Mobilities: Practices, Spaces, Subjects*. London: Routledge.
- Crivello, S. 2015. "Urban Policy Mobilities: The Case of Turin as a Smart City." *European Planning Studies* 23 (5): 909–21.
- Crivello, S. 2015. "Political Ecologies of a Waste Incinerator in Turin, Italy: Capital Circulation and the Production of Urban Natures." *Cities* 48: 109–15.
- Crivello, S. 2011. "Spatial Dynamics in the Urban Playscape: Turin by Night." *Town Planning Review* 82 (6): 709–31.
- Crivello, S. 2018. "I Murazzi Del Po: Dinamiche e Trasformazioni Del Waterfront Torinese Negli Ultimi Quarant'anni." In *Torino. Un Profilo Etnografico*, edited by C. Capello and G. Semi, 49–68. Milano: Meltemi.
- Crompton, J. L. 2007. "The Role of the Proximate Principle in the Emergence of Urban Parks in the United Kingdom and in the United States." *Leisure Studies* 26 (2): 213–34.
- Cronon, W. 1996. "The Trouble with Wilderness: Or, Getting Back to the Wrong Nature." *Environmental History* 1 (1): 7–28.
- Dameri, A. 2008. "Le Esposizioni Al Valentino: Il Parco e Le Sponde." In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. M. Lupo, and S. Poletto, 95–102. Torino: Celid.
- Davila, T. 2002. *Marcher, Créer: Déplacements, Flâneries, Dérives Dans l'art de La Fin Du XXe Siècle*. Paris: Ed. du Regard.
- Davis, M. 2002. *Dead Cities and Other Tales*. New York: The New Press.
- De Arce, R. P. 2018. *City of Play: An Architectural and Urban History of Recreation and Leisure*. London: Bloomsbury Publishing.
- De Block, G. 2016. "Ecological Infrastructure in a Critical-Historical Perspective: From Engineering 'Social' Territory to Encoding 'Natural' Topography." *Environment and Planning A* 48 (2): 367–90.
- De Certeau, M. 1992. *L'invention Du Quotidien. 1. Arts de Faire*. Paris: Folio Essais.
- Di Palma, V. 2014. *Wasteland: A History*. New Heaven: Yale University Press.
- De Rossi, A., and G. Durbiano. 2006. *Torino 1980-2011. La trasformazione e le sue Immagini*. Torino: Allemandi & C.
- De Rossi, A. 2011. "To-Morrow." In *Torino 011 Biografia Di Una Città*, edited by Aldo Bagnasco and Carlo Olmo, 65–74. Torino: Electa.
- Décamps, H., R.J. Naiman, and M.E. McClain. 2009. "Riparian Zones" in *Encyclopedia of Inland Waters*, edited by Likens Gene, 396-403, Oxford: Elsevier.
- Defabiani, V. 2010. "Il Verde Fluviale. Da Maisons de Plaisance a Parchi Urbani." In *Parchi Pubblici, Acqua e Città : Torino e l'Italia Nel Contesto Europeo*, edited by P. Cornaglia, 77–83. Torino: Celid.
- Degen, M., and G. Rose. 2012. "The Sensory Experiencing of Urban Design : The Role of Walking and Perceptual Memory." *Urban Studies* 49 (November): 3271–87.
- Degen, M., and K. Hetherington. 2001. "Hauntings." *Space and Culture* 11 (12): 1–6.
- Dematteis, G. 2008. *L'Italia Delle Città: Tra Malessere e Trasfigurazione*. Roma: Società Geografica Italiana.

- Demos, T. J. 2017. *“Against the Anthropocene.” Visual Culture and Environment Today*. Berlin: Sternberg Press.
- Demos, T. J. 2016. *Decolonizing Nature: Contemporary Art and the Politics of Ecology*. Berlin: Sternberg Press.
- Desai, R., C. McFarlane, and S. Graham. 2015. “The Politics of Open Defecation: Informality, Body, and Infrastructure in Mumbai.” *Antipode* 47 (1): 98–120.
- DeSilvey, C., and T. Edensor. 2012. “Reckoning with Ruins.” *Progress in Human Geography* 37 (4): 465–85.
- Desfor, G., J. Ladley, Q. Stevens, and D. Schubert. 2011. *Transforming Urban Waterfronts: Fixity and Flow*. New York and Abingdon: Routledge.
- Desmond, M. 2014. “Relational Ethnography.” *Theory and Society* 43 (5): 547–79.
- Devecchi, M. 2008. “Specie Ornamentali e Progettazione Del Verde Pubblico.” In *Paesaggi Fluviali e Verde Urbano: Torino e l’Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. M. Lupo, and S. Poletto, 79–94. Torino: Celid.
- Devecchi, M., and P. Odone. 2008. “La Manutenzione e La Gestione Del Verde Fluviale.” In *Paesaggi Fluviali e Verde Urbano: Torino e l’Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. M. Lupo, and S. Poletto, 135–45. Torino: Celid.
- Di Biagi, P. 2008. *La Città Pubblica. Edilizia Sociale e Riqualificazione Urbana a Torino*. Torino: Allemandi.
- Dillon, B. 2011. *Ruins*. London: Whitechapel Gallery.
- Dines, N. 2018. “Introduction. Ethnography and Waste.” *Etnografia e Ricerca Qualitativa* 1: 5–10.
- Dooling, S. 2009. “Ecological Gentrification: A Research Agenda Exploring Justice in the City.” *International Journal of Urban and Regional Research* 33 (3): 621–39.
- Doron, G. M. 2000. “Architecture of Transgression.” *City* 4 (2).
- Doshi, S. 2017. “Embodied Urban Political Ecology: Five Propositions.” *Area* 49(1): 125-128.
- Douglas, M. 2002. *Purity and Danger: An Analysis of Concepts of Pollution and Taboo*. London and New York: Routledge & Keagan Paul.
- Douglas, I. 2013. *Cities: An Environmental History*. London: IB Tauris.
- Draus, P., and J. Roddy. 2018. “Weeds, Pheasants and Wild Dogs: Resituating the Ecological Paradigm in Postindustrial Detroit.” *International Journal of Urban and Regional Research* 42 (5): 807–27.
- Dufrenne, M. 1973. *The Phenomenology of Aesthetic Experience 1953 1973*. Evanston: Northwestern University Press.
- Dummett, E. 2007. “Green Space and Cosmic Order: Le Corbusier’s Understanding of Nature.” Edinburgh: Edinburgh College of Art.
- Ecopolis Nkoni. *Ecopolis. 30 Anni Di Ambientalismo a Torino. La Memoria Dei Movimenti Raccontato Da Un Ex Circolo Di Legambiente*. 2017. Torino: StreetLib.
- Edensor, T. 2005. “The Ghosts of Industrial Ruins: Ordering and Disordering Memory in Excessive Space.” *Environment and Planning D: Society and Space* 23: 829–49.
- Edensor, T. 2013. “Reconnecting with Darkness: Gloomy Landscapes, Lightless Places.” *Social & Cultural Geography* 14 (4): 446–65.
- Edensor, T. 2015. “Producing Atmospheres at the Match: Fan Cultures, Commercialisation and Mood Management in English Football.” *Emotion, Space and Society* 15: 82–89.
- Edensor, T. 2012. “Illuminated Atmospheres: Anticipating and Reproducing the Flow of Affective Experience in Blackpool.” *Environment and Planning D: Society and Space* 30 (6): 1103–22.

- Edensor, T. 2017. *From Light to Dark: Daylight, Illumination, and Gloom*. Minneapolis: University of Minnesota Press.
- Edensor, T., and H. Lorimer. 2015. "Landscape at the Speed of Light: Darkness and Illumination in Motion." *Geografiska Annaler: Series B, Human Geography* 97 (1): 1–16.
- Edensor, T., and S. Sumartojo. 2015. "Designing Atmospheres: Introduction to Special Issue." *Visual Communication* 14 (3): 251–65.
- Edwards E., G. Evans, and K. Smith. 2012. "Introduction. The middle-classification of Britain" in *Focaal-Journal of Global and Historical Anthropology* 62: 3-16.
- Elden, S. 2017. "Legal Terrain—the Political Materiality of Territory." *London Review of International Law* 5 (2): 199–224.
- Emerson, R.M., R.I. Fretz, and L.L. Shaw. 2011. *Writing Ethnographic Fieldnotes*. Chicago: University of Chicago Press.
- Evans, D. ed., 2012. *The Art of Walking: A Field Guide*. London: Black Dog Publishing.
- Evans, J., and P. Jones. 2011. "The Walking Interview: Methodology, Mobility and Place." *Applied Geography* 31 (2): 849–58.
- Evenen, M. 2018. "Beyond the Organic Machine? New Approaches in River Historiography." *Environmental History* 23 (4): 698–720.
- European Communion. 2015. "Towards an EU Research and Innovation Policy Agenda for Nature-Based Solutions and Re-Naturing Cities. Final Report of the Horizon 2020 Expert Group." Brussels.
- Falzon, M., ed., 2016. *Multi-Sited Ethnography: Theory, Praxis and Locality in Contemporary Research*. London: Routledge.
- Feld, S. 2012. *Sound and Sentiment*. Durham: Duke University Press.
- Fezer J., and M. Schmitz eds. 2012. *Lucius Burckhardt Writings. Rethinking Man-Made Environments: Politics, Landscape Design*. Wien: Springer Wien.
- Fregolent, L. 2008. *Periferia e Periferie*. Milano: Franco Angeli.
- Frisina, A. 2013. *Ricerca Visuale e Trasformazioni Socio-Culturali*. Torino: UTET Università.
- Gabert, P. 1964. *Turin. Ville Industrielle*. Paris: Presses Universitaires de France.
- Gagné, K., and M. B. Rasmussen. 2016. "Introduction—an Amphibious Anthropology: The Production of Place at the Confluence of Land and Water." *Anthropologica* 58 (2): 135–49.
- Gandy, M. 2012. "Queer Ecology: Nature, Sexuality, and Heterotopic Alliances." *Environment and Planning D: Society and Space* 30.
- Gandy, M. 2002. *Concrete and Clay. Reworking Nature in New York City*. Cambridge, Massachusetts-London, England: MIT Press .
- Gandy, M. 2018. "Cities in Deep Time: Bio-Diversity, Metabolic Rift, and the Urban Question." *City* 22 (1): 96–105.
- Gandy, M. 2012. "Entropy by Design : Gilles Clément , Parc Henri Matisse and the Limits to Avant-Garde Urbanism." *International Journal of Urban and Regional Research*.
- Gandy, M. 2013. "Marginalia: Aesthetics, Ecology, and Urban Wastelands." *Annals of the Association of American Geographers* 103(6): 37–41.
- Gandy, M. 2017. "Urban Atmospheres." *Cultural Geographies* 24 (3).
- Garda, E., M. Mangosio, C. Mele, and C. Ostorero eds. 2015. *Valigia Di Cartone e Case Di Cemento. Edilizia, Industrializzazione e Cantiere a Torino Nel Secondo Novecento*. Torino: Celid.
- Ghisleni, P., and M. Maffioli. 1971. *Il Verde Della Città Di Torino*. Torino: Associazione Piemonte Italia.

- Girardet, H. 2014. "The Metabolism of Cities." In *Sustainable Urban Development Reader*, edited by S. M. Wheeler and T. Beatley, 125–32. London and New York: Routledge .
- Gissara, M. 2018. "Intorno Al Lago. La Riappropriazione Popolare Dell'area Dell'ex Snia Viscosa a Roma." *Tracce Urbane. Rivista Italiana Transdisciplinare Di Studi Urbani* 2 (4).
- Gordillo, G. R. 2018. "Terrain as Insurgent Weapon: An Affective Geometry of Warfare in the Mountains of Afghanistan." *Political Geography* 64: 53–62.
- Gordillo, G. R. 2013. "Opaque Zones of Empire: Notes Towards a Theory of Terrain." *Association of American Geographers Annual Meetings* 9.
- Gordillo, G. R. 2014. *Rubble: The Afterlife of Destruction*. Durham: Duke university press.
- Gould, K. A., and T. L. Lewis. 2016. *Green Gentrification: Urban Sustainability and the Struggle for Environmental Justice*. New York: Routledge.
- Governa, F., and M. Lancione. 2011. "La Città Del Sociale: Dalle Immagini Come Retoriche Alle Non Rappresentazioni Come Pratiche." In *Di Capitale Importanza. Immagini e Trasformazioni Urbane Di Torino*, edited by M. Santangelo and A. Vanolo, 119–36. Roma: Carocci.
- Governa, F., and S. Saccomani. 2004. "From Urban Renewal to Local Development . New Conceptions and Governance Practices in the Italian Peripheries." *Planning Theory and Practice* 5 (3): 327–48.
- Governa, F., and S. Saccomani. 2009. "Housing and Urban Regeneration Experiences and Critical Remarks Dealing with Turin." *International Journal of Housing Policy* 9 (4): 391–410.
- Governa F., and C. Salone, "Territories in Action, Territories for Action: The Territorial Dimension of Italian Local Development Policies." 2004. *International Journal of Urban and Regional Research* 28 (4): 796–818.
- Grandin, G. 2009. *Fordlandia: The Rise and Fall of Henry Ford's Forgotten Jungle City*. New York: Picador.
- Gray, R., and S. Sheikh. 2018. "The Wretched Earth." *Third Text* 32 (2–3).
- Gribaudo, D. 1954. "Torino e La Sua Collina." *Studi Geografici Su Torino e Il Piemonte*, 11–65.
- Grigliè, R. 1968. *Invito Alla Collina Torinese*. Torino: Vigolongo.
- Grimm, N. B., S. H. Faeth, N. E. Golubiewski, C. L. Redman, J. Wu, X. Bai, and J. M. Briggs. 2008. "Global Change and the Ecology of Cities." *Science* 319 (5864): 756–60.
- Hall, M. 2013. "The Ecological and Environmental Significance of Urban Wastelands and Drosscapes." In *Organising Waste in the City International Perspectives on Narratives and Practices*, edited by Maria José Zapata and Michael Hall. Bristol: Bristol University Press.
- Hannerz, U. 2003. "Being There... and There... and There! Reflections on Multi-Site Ethnography." *Ethnography* 4 (2): 201–16.
- Haraway, D. 1988. "Situated Knowledges: The Science Question in Feminism and the Privilege of Partial Perspective." *Feminist Studies* 14 (3): 575–99.
- Haraway, D. 2003. *The Companion Species Manifesto. Dogs, People and Significant Otherness*. Chicago: Prickly Paradigm Press.
- Haraway, D. 2016. *Staying with the Trouble: Making Kin in the Chthulucene*. Durham: Duke University Press.
- Harvey, D. 2013. "Emerging Landscapes of Heritage." In *The Routledge Companion to Landscape Studies*, edited by P. Howard, I. Thompson, E. Waterton, and M. Atha, 152–65.
- Head, L., J. Atchison, C. Phillips, and K. Buckingham. 2014. "Vegetal Politics: Belonging, Practices and Places." *Social and Cultural Geography* 15 (8): 861–70.
- Helphand, K. I. 2006. *Defiant Gardens: Making Gardens in Wartime*. San Antonio, TX: Trinity University Press.

- Heynen, N. 2017. "Urban Political Ecology III: The Feminist and Queer Century." *Progress in Human Geography*, 1–7.
- Heynen, N. 2015. "Urban Political Ecology II : The Abolitionist Century." *Progress in Human Geography*, 1–7.
- Heynen, N. 2013. "Urban Political Ecology I: The Urban Century." *Progress in Human Geography*, 1–7.
- Heynen, N. 2016. "Urban Political Ecology II: The Abolitionist Century." *Progress in Human Geography*.
- Heynen, N., M. Kaika, and E. Swyngedouw, eds., 2006. *In the Nature of Cities. Urban Political Ecology and the Politics of Urban Metabolism*. London: Routledge.
- Hinchliffe, S., and S. Whatmore. 2006. "Living Cities: Towards a Politics of Conviviality." *Science as Culture* 15 (2): 123–38.
- Holifield, R., J. Chakraborty, and Gordon Walker, eds., 2017. *The Routledge Handbook of Environmental Justice*. New York: Routledge
- Hondagneu-Sotelo, P. 2014. *Paradise Transplanted: Migration and the Making of California Gardens*. Oakland: Oakland: University of California Press.
- Horne, J., and W. Manzenreiter. 2006. "Sports Mega-Events: Social Scientific Analyses of a Global Phenomenon." *Sociological Review* 54 (2): 1–187.
- Howard, P., I. Thompson, E. Waterton, and M. Atha eds., 2013. *The Routledge Companion to Landscape Studies*. Abingdon and New York: Routledge.
- Howes, D. 2003. *Sensual Relations: Engaging the Senses in Culture and Social Theory*. Ann Arbor: University of Michigan Press.
- Ingold, T. 2011. "Worlds of Sense and Sensing the World : A Response to Sarah Pink and David," 313–17.
- Ingold, T. 2010. "Footprints through the Weather-world: Walking, Breathing, Knowing." *Journal of the Royal Anthropological Institute* 16: S121–39.
- Ingold, T. 2004. "Culture on the Ground: The World Perceived through the Feet." *Journal of Material Culture* 9 (3): 315–40.
- Ingold, T. 2011. *Being Alive: Essays on Movement, Knowledge and Description*. London-New York: Routledge.
- Ingold, T. 2008. "Bindings against Boundaries: Entanglements of Life in an Open World." *Environment and Planning A* 40 (8): 1796–1810.
- Ingold, T. 2000. *The Perception of the Environment. Essays on Livelihood, Dwelling and Skills*. London and New York: Routledge.
- Ingold, T., and J. L. Vergunst eds., 2008. *Ways of Walking: Ethnography and Practice on Foot*. Edited by Tim Ingold and Jo Lee Vergunst. London and New York: Rutledge.
- Irving, A. 2011. "Strange Distance: Towards an Anthropology of Interior Dialogue." *Medical Anthropology Quarterly* 25 (1): 22–44.
- Irving, A. 2013. "A New Sense of Scale." *The Senses and Society* 8 (3): 290–313.
- Ischia, U. 2012. *La Città Giusta: Idee Di Piano e Atteggiamenti Etici*. Roma: Donzelli Editore.
- Isenhour, C., G. McDonogh, and M. Checker eds., 2015. *Sustainability in the Global City*. Cambridge: Cambridge University Press.
- Jacobs, J. 1961. *The Death and Life of Great American Cities*. New York: Random House.
- Kabisch, N., H. Kornst, J. Stadler, and A. Bonn. 2017. "Nature-based-solutions to Climate Change Adaptations in Urban Areas. Linkages Between Science, Politics and Practice" in *Nature-based-solutions to Climate Change Adaptations in Urban Areas*. Edited by Kabisch, N., H. Kornst, J. Stadler, and A. Bonn. Theory and Practice of Urban Sustainability Transition.

- Kaika, M. 2005. *City of Flows: Modernity, Nature, and the City*. New York and London: Routledge.
- Kärrholm, M. 2007. "The Materiality of Territorial Production: A Conceptual Discussion of Territoriality, Materiality, and the Everyday Life of Public Space." *Space and Culture* 10 (4): 437–53.
- Kärrholm, M. 2005. "Territorial Complexity in Public Places. A Study of Territorial Production at Three Squares in Lund." *Nordisk Arkitekturforskning*, no. 1: 99–114.
- Katz, C. 1994. "Playing the Field: Questions of Fieldwork in Geography." *The Professional Geographer* 46 (1): 67–72.
- Kazig, R., and D. Masson. 2015. "L'ambiance Comme Concept de La Géographie Culturelle Francophone Atmosphere as a Concept for French-Speaking Cultural Geography: Challenges and Research Perspectives." *Géographie et Cultures* 93–94: 215–32.
- Kazig, R., D. Masson, and R. Thomas. 2016. "Atmospheres and Mobility." *Mobile Culture Studies-The Journal*, 1–7.
- Keil, R., and J. Graham. 1998. "Reasserting Nature: Constructing Urban Environments after Fordism." In *Remaking Reality: Nature at the Millennium*, edited by Bruce Braun and Noel Castree, 100–125. London: Routledge.
- Kern, L. 2015. "From Toxic Wreck to Crunchy Chic: Environmental Gentrification through the Body." *Environment and Planning D: Society and Space* 33: 67–83.
- Knorr-Cetina, K., E. Von Savigny, and T.R. Schatzki eds., 2001. *The Practice Turn in Contemporary Theory*. London and New York: Routledge.
- Kowarik, I. 2013. "Cities and Wilderness. A New Perspective." *International Journal of Wilderness* 19 (3): 32–36.
- Kowarik, I., and S. Körner eds., 2005. *Wild Urban Woodlands*. Berlin: Springer.
- Kuschnir, K. 2016. "Ethnographic Drawing: Eleven Benefits of Using a Sketchbox for Fieldwork." *Visual Ethnography* 5 (1).
- Kusenbach, M. 2003. "Street Phenomenology: The Go-along as Ethnographic Research Tool." *Ethnography* 4 (3): 455–85.
- Lambertini, A. 2006. "Fare Parchi Urbani: Etiche Ed Estetiche Del Progetto Contemporaneo in Europa." Firenze: Firenze University Press.
- Lancione, M., and C. McFarlane. 2016. "Life at the Urban Margins: Sanitation Infra-Making and the Potential of Experimental Comparison." *Environment and Planning A* 48 (12): 2402–21.
- Lancione, M., ed., 2016. *Rethinking Life at the Margins. The Assemblage of Context, Subjects and Politics*. London and New York: Routledge .
- Lancione, M., and C. McFarlane. 2016. "Life at the Urban Margins: Sanitation Infra-Making and the Potential of Experimental Comparison." *Environment and Planning A: Economy and Space* 48 (12): 2402–21.
- Larkin, B. 2013. "The Politics and Poetics of Infrastructure." *Annual Review of Anthropology* 42: 327–43.
- Larsen, J.. 2014. "(Auto) Ethnography and Cycling." *Journal of Social Research Methodology* 17 (1): 59–71.
- Latour, B. 2005. *Reassembling the Social. An Introduction to Actor-Network Theory*. Oxford: Oxford University Press.
- Laurier, E., H. Lorimer, B. Brown, O. Jones, O. Juhlin, A. Noble, and M. Perry. 2008. "Driving and 'Passenger': Notes on the Ordinary Organization of Car Travel." *Mobilities* 3 (1): 1–23.
- Lehmkuhl, U., and H. Wellenreuther eds., 2007. *Historians and Nature. Comparative Approaches to Environmental History*. Oxford-New York: Berg.

- Lindner, C., and M. Meissner eds., 2015. *Global Garbage: Urban Imaginaries of Waste, Excess, and Abandonment*. Abingdon and New York: Routledge .
- Lorimer, H. 2005. "Cultural Geography : The Busyness of Being 'More-than-Representational'." *Progress in Human Geography* 1: 83–94.
- Lorimer, J. 2015. *Wildlife in the Anthropocene: Conservation after Nature*. Minneapolis: University of Minnesota Press.
- Lorimer, J. 2008. "Living Roofs and Brownfield Wildlife: Towards a Fluid Biogeography of UK Nature Conservation." *Environment and Planning A* 40 (9): 2042–60.
- Lorimer, J. 2017. "Probiotic Environmentalities: Rewilding with Wolves and Worms." *Theory, Culture & Society* 34 (4): 27–48.
- Lorimer, J. 2016. "Rot." *Environmental Humanities* 8 (2): 235–39.
- Low, S. 2016. *Spatializing Culture: Ethnography of Space and Place*. London: Routledge.
- Low, S. M. 2010. *On the Plaza: The Politics of Public Space and Culture*. Austin: University of Texas Press.
- Low, S. M. 2013. "Public Space and Diversity: Distributive, Procedural and Interactional Justice for Parks." *The Ashgate Research Companion to Planning and Culture*, 295–310.
- Low, S. M. ed., 2003. *The Anthropology of Space and Place*. Oxford: Blackwell.
- Low, S., and N. Smith eds. 2013. *The Politics of Public Space*. Hoboken: Taylor and Francis.
- Low, Setha, D. Taplin, and S. Scheld, eds. 2009. *Rethinking Urban Parks: Public Space and Cultural Diversity*. Austin: University of Texas Press.
- Lucas, G. 2013. "Ruins." In *The Oxford Handbook of the Archaeology of the Contemporary World*, edited by P. Graves-Brown, H. Rodney, and A. Piccini, 167–77. Oxford: Oxford University Press.
- Lupo, G. M. 2008. *Il Verde Urbano e Le Sponde Fluviali*. Edited by P. Cornaglia, G. M. Lupo, and S. Poletto. Torino: Celid.
- Lyytimäki, J., L. K. Petersen, B. Normander, and P. Bezák. 2008. "Nature as a Nuisance? Ecosystem Services and Disservices to Urban Lifestyle." *Environmental Sciences* 5 (3): 161–72.
- Macpherson, H. 2010. "Non-Representational Approaches to Body – Landscape Relations." *Geography Compass* 1: 1–13.
- Maestri, G. 2016. "From Nomads to Squatters: Towards a Deterritorialisation of Roma Exceptionalism through Assemblage Thinking." In *Rethinking Life at the Margins The Assemblage of Contexts, Subjects, and Politics*, edited by M. Lancione. London: Routledge .
- Maffioli, M. 1978(a). "Po, Dora e Sangone Nel Territorio Torinese." *Cronache Economiche*, no. 5–6: 3–88.
- Maffioli, M. 1978(b). "Po, Dora e Sangone Nel Territorio Torinese." *Cronache Economiche*, no. 7–8: 19–51.
- Maffioli, M. 1978(c). "Po, Dora, Sangone Nel Territorio Torinese." *Cronache Economiche*, no. 9–10: 3–138.
- Marcus, G. E. 1995. "Ethnography in/of the World System: The Emergence of Multi-Sited Ethnography." *Annual Review of Anthropology* 24 (1): 95–117.
- Mariani, M., and P. Barron eds. 2014. *Terrain Vague: The Interstices at the Age of the Pale*. London: Routledge.
- Maruthaveeran, S., and C.C.K. Van Den Bosch. 2014. "A socio-ecological exploration of fear of crime in urban green spaces. A systematic review." *Urban Forestry and Urban Greening* 13 (1): 1-18.
- Maschietti, G., M. Muti, and P. Passerin D'Entrèves, eds. 1990. *Giardini Zoologici:Vicende Storico-Politiche Degli Zoo Torinesi (1851-1989)*. Torino: Allemandi.

- Massey, D. 2005. *For Space*. London: Sage.
- McCormack, D. P. 2008. "Engineering Affective Atmospheres on the Moving Geographies of the 1897 Andrée Expedition." *Cultural Geographies* 15 (4): 413–30.
- McFarlane, C. 2008. "Sanitation in Mumbai's Informal Settlements: State, 'Slum', and Infrastructure." *Environment and Planning A* 40 (1): 88–107.
- McKay G. 2011. *Radical Gardening. Politics, Idealism and Rebellion in the Garden*. London: Frances Lindon.
- McPhearson, T., S. T. A. Pickett, N. B. Grimm, J. Niemelä, M. Alberti, T. Elmqvist, Christiane Weber, D. Haase, J. Breuste, and S. Qureshi. 2016. "Advancing Urban Ecology toward a Science of Cities." *BioScience* 63 (3): 198–212.
- Mela, A. 1997. *La Configurazione Sociale Dei Diversi Ambiti Spaziali Della Città Di Torino*. Torino: IRES.
- Mela, A., Davico, L., Conforti L. 2000. *La Città, Una e Molte. Torino e Le Sue Dimensioni Spaziali*. Napoli: Liguori.
- Mela, Alfredo, ed. 2014. *La Città Con-Divisa. Lo Spazio Pubblico a Torino*. Milano: Franco Angeli .
- Millington, N. 2015. "From Urban Scar to 'Park in the Sky': Terrain Vague, Urban Design, and the Remaking of New York City's High Line Park." *Environment and Planning A* 47: 2324–38.
- Millington, N. 2013. "Post-Industrial Imaginaries: Nature, Representation and Ruin in Detroit, Michigan." *International Journal of Urban and Regional Research* 37 (1): 279–96.
- Millington, N. 2018. "Linear Parks and the Political Ecologies of Permeability: Environmental Displacement in São Paulo, Brazil." *International Journal of Urban and Regional Research* 42 (5): 864–81.
- Mitchell, D. 2003. *The Right to the City: Social Justice and the Fight for Public Space*. New York and London: Guilford Press.
- Moroni, S., and F. Chiodelli. 2014. "Municipal Regulations and the Use of Public Space: Local Ordinances in Italy." *Cities, Territories and Architecture* 1 (11).
- Mostafavi, M., and C. Najile. 2004. *Landscape Urbanism: A Manual for the Mechanic Landscape*. Edited by Mohsen Mostafavi and Ciro Najile. London: Architectural Association.
- Mouffe, C. 2007. "Artistic Activism and Antagonistic Spaces." *Art and Research* 1 (2): 1–5.
- Myer, N. 2015. "Edenic Apocalypse: Singapore's End-of-Time Botanical Tourism." *Open Humanities Press* .
- Natali, L., and M. de Nardin Budó. 2018. "A Sensory and Visual Approach for Comprehending Environmental Victimization by the Asbestos Industry in Casale Monferrato." *European Journal of Criminology*.
- Neimanis, A., and R. Loewen Walker. 2014. "Weathering: Climate Change and the 'Thick Time' of Transcorporeality INTRODUCTION: TOWARD A NEW IMAGINARY OF CLIMATE CHANGE." *Hypatia* 29 (3): 558–75.
- Nixon, R. 2011. *Slow Violence and the Environmentalism of the Poor*. Boston: Harvard University Press.
- O'Reilly, K. 2012. *Ethnographic Methods*. London and New York: Routledge .
- Orueta, F. D., and S. S. Fainstein. 2008. "The New Mega-projects: Genesis and Impacts." *International Journal of Urban and Regional Research* 32 (4): 759–67.
- Pace, S. 2011. "Condizioni Di Partenza. Architettura e Società a Torino Negli Anni Ottanta e Novanta." In *Torino 011 Biografia Di Una Città*, edited by A. Bagnasco and C. Olmo, 34–46. Torino: Electa.
- Pagliassotti, M. 2014. *Sistema Torino, Sistema Italia*. Roma: Castelvecchi.

- Park, L. S., and D. N. Pellow. 2011. *The Slums of Aspen: The War on Immigrants in America's Eden*. New York: New York University Press.
- Patrick, D. 2014. "Queering the Urban Forest: Invasions, Mutualisms, and Eco-Political Creativity with the Tree of Heaven (*Ailanthus Altissima*).” In *Urban Forests, Trees, and Greenspace: A Political Ecology Perspective*, edited by L. A. Sandberg, A. Bardekjian, and S. Butt, 209–24. London: Routledge.
- Patrick, D. J. 2014. "The Matter of Displacement: A Queer Urban Ecology of New York City's High Line.” *Social and Cultural Geography* 15 (8): 920–41.
- Pavoni, A., and A. M. Brighenti. 2017. "City of Unpleasant Feelings. Stress, Comfort and Animosity in Urban Life.” *Social & Cultural Geography* 20 (2): 137–56.
- Pavoni, A., and A. M. Brighenti eds., 2016. *Urban Animals*. Edited by Andrea Pavoni and Andrea Brighenti. *Lo squaderno. Explorations in Space and Society*.
- Peck, J., and A. Tickell. 2002. "Neoliberalizing Space.” *Antipode* 34 (3): 380–404.
- Peirone, F. 2017. *Torino e i Suoi Fiumi Otto Secoli Di Storia in 170 Immagini*. Torino: Priuli e Varlucca.
- Peirot, A. 1965. *Torino Nei Secoli: Vedute e Piante, Feste e Cerimonie Nell'incisione Dal Cinquecento All'Ottocento: Bibliografia, Iconografia, Repertorio Degli Artisti. 1538-1825*. Torino: Tipografia Torinese.
- Pennacini, C. 2005. *Filmare Le Culture. Introduzione all'antropologia visiva*. Roma:ci.
- Philo, C., and C. Wilbert eds., 2000. *Animal Spaces, Beastly Places. New Geographies of Human-Animal Relations*. London and New York: Routledge.
- Piasere, L. 2002. *L'etnografo Imperfetto*. Roma: Giuseppe Laterza & Figli.
- Pichon, P., and J. P. Thibaud. 2017. "Animer l'espace Public ? Une Question Pluridisciplinaire de Recherche.” *Ambiances*.
- Pine, B. J., and J. H. Gilmore. 1999. *The Experience Economy: Work Is Theatre & Every Business a Stage*. Boston: Harvard Business Press.
- Pink, S. 2008. "Mobilising Visual Ethnography: Making Routes, Making Place and Making Images.” *Forum Qualitative Sozialforschung* 9 (3).
- Pink, S. 2008. "An Urban Tour: The Sensory Sociality of Ethnographic Place-Making.” *Ethnography* 9 (2): 175–96
- Pink, S. 2009. *Doing Sensory Ethnography*. Los Angeles: Sage.
- Pink, S., K. L. Mackley, and R. Moroşanu. 2015. "Researching in Atmospheres: Video and the 'Feel' of the Mundane.” *Visual Communication* 14 (3): 351–69.
- Pinson, G. 2002. "Political Government and Governance: Strategic Planning and the Reshaping of Political Capacity in Turin.” *International Journal of Urban and Regional Research* 26 (3): 477–93.
- Pisanello, C. 2017. *In Nome del decoro. Dispositivi estetici e politiche securitarie*. Verona: Ombre Corte.
- Pitch, T. 2013. *Contro il decoro. L'uso politico della pubblica decenza*. Bari: Laterza.
- Pizzolato, N. 2008. *Challenging Global Capitalism. Labor Migration, Radical Struggle, and Urban Change in Detroit and Turin*. Basingstoke: Palgrave.
- Poletto, Sandra. 2008. "Un Giardino Zoologico Sul Po.” In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, edited by P. Cornaglia, G. M. Lupo, and S. Poletto, 103–8. Torino: Celid.
- Porcellana, V. 2018. "A 'Bassa Soglia'. Persone Senza Dimora e Servizi Di Accoglienza a Torino.” In *Torino. Un Profilo Etnografico*, edited by C. Capello and G. Semi, 201–21. Milano: Meltemi.

- Pred, A. 2014. *Recognising European Modernities: A Montage of the Present*. Hoboken: Taylor and Francis.
- Przybylo, E., and S. Rodrigues eds., 2019. "Introduction: On the Politics of Ugliness." In *On the Politics of Ugliness*, edited by E. Przybylo and S. Rodrigues. Cham: Palgrave Macmillan.
- Pulido, L. 2000. "Rethinking Environmental Racism: White Privilege and Urban Development in Southern California." *Annals of the Association of American Geographers* 90 (1): 12–40.
- Quastel, N. 2009. "Political Ecologies of Gentrification." *Urban Geography* 30 (7): 694–725.
- Qviström, M. 2007 Landscapes out of order: studying the inner urban fringe beyond the rural–urban divide. 2007. *Geografiska Annaler: Series B, Human Geography* 89 (3): 269–82.
- Qviström, M. 2012. "Network Ruins and Green Structure Development: An Attempt to Trace Relational Spaces of a Railway Ruin." *Landscape Research* 37 (3): 257–75.
- Rademacher, A. 2015. "Urban Political Ecology." *Reviews in Advance*, no. July: 137–52.
- Rademacher, A, and D. E. Rocheleau. 2011. *Reigning the River: Urban Ecologies and Political Transformation in Kathmandu*. Durham, NC: Duke University Press.
- Radicioni, R., and P. G. Lucco Borlera. 2009. *Torino Invisibile*. Torino: Alinea.
- Rapport, N. 1991. "Writing Fieldnotes: The Conventionalities of Note-Taking and Taking Note in the Field." *Anthropology Today* 7 (1): 10–13.
- Reeve, A.C., C. Desha , D. Hargreaves, and K. Hargroves. 2015. "Biophilic urbanism: contributions to holistic urban greening for urban renewal". *Smart and Sustainable Built Environment*. 4 (2): 215-233.
- Reinert, W. 2016. "GiraffeTM: Animals and Keepers between High Nature and Urban Popular Culture in the History of Zoological Gardens." In *Urban Animals*, edited by A. Pavoni and A. M. Brighenti, 42nd ed. Lo Squaderno.Explorations in Space and Society.
- Reno, J. 2015. "Waste and Waste Management." *Annual Review of Anthropology*, 557–72.
- Richards, S. 2016. *Architect Knows Best: Environmental Determinism in Architecture*. New York: Routledge.
- Robbins, P. 2011. *Political Ecology: A Critical Introduction*. Hoboken: John Wiley & Sons.
- Rosa, E. 2016. "Marginality as Resource? From Roma People Territorial Practices, an Epistemological Reframing of Urban Marginality." In *Life at the Margins. The Assemblage of Contexts, Subjects and Politics*, edited by M. Lancione. London: Routledge .
- Rose, G. 2016. *Visual Methodologies: An Introduction to Researching with Visual Materials*. Los Angeles: Sage.
- Rose, M. H. 2004. "Technology and Politics: The Scholarship of Two Generations of Urban-Environmental Historians." *Journal of Urban History*.
- Rose, M., and J. Wylie. 2006. "Animating Landscape." *Environment and Planning D: Society and Space* 24: 475–79.
- Rossi, U. 2018. "The Populist Eruption and the Urban Question." *Urban Geography*, 1–6.
- Rossi, U., and A. Vanolo. 2011. *Urban Political Geographies: A Global Perspective*. Los Angeles and London: Sage.
- Sacchi, P., and P. P. Viazzo eds., 2003. *Più Di Un Sud: Studi Antropologici Sull'immigrazione a Torino*. Milano: Franco Angeli.
- Sandercock, L. 2003. "Out of the Closet: The Importance of Stories and Storytelling in Planning Practice." *Planning Theory & Practice* 4 (1): 11–28.
- Santangelo, M., and A. Vanolo eds. 2010. *Di Capitale Importanza. Immagini e Trasformazioni Urbane Di Torino*. Roma: Carrocci Editore.
- Sassen, S. 2009. "Cities in Today's Global Age." *SAIS Review of International Affairs* 29 (1): 3–34.

- Schmitz, H. 1969. *System Der Philosophie, Bd. III: Der Raum, 2. Teil: Der Gefühlsraum*. Bonn: Bouvier Verlag.
- Schroer, S. A., and S. B. Schmitt. 2017. *Exploring Atmospheres Ethnographically*. Abingdon and New York: Routledge.
- Semi, G. 2004. "Il Quartiere Che (Si) Distingue. Un Caso Di" Gentrification" a Torino." *Studi Culturali* 1 (1): 83–108.
- Semi, G. 2015. *"Gentrification." Tutte Le Città Come Disneyland*. Bologna: Il Mulino.
- Sharma, S. 2014. *In the Meantime. Temporality and Cultural Politics*. Durham and London: Duke University Press.
- Sharma, S. 2013. "Critical Time." *Communication and Critical/Cultural Studies* 10 (2): 312–18.
- Sheller, M. 2004. "Automotive Emotions: Feeling the Car." *Theory, Culture & Society* 21 (4–5): 221–42.
- Sheller, Mimi, and J. Urry. 2016. "Mobilizing the New Mobilities Paradigm." *Applied Mobilities* 1 (1): 10–25.
- Simpson, P. 2017. "A Sense of the Cycling Environment: Felt Experiences of Infrastructure and Atmospheres." *Environment and Planning A: Economy and Space* 49 (2): 426–47.
- Sistri, A. 2008. "La Normativa per La Tutela Del Verde Pubblico: Il Caso Di Torino." In *Paesaggi Fluviali e Verde Urbano: Torino e l'Europa Tra Ottocento e Novecento*, 117–26. Torino: Celid.
- Slater, T. 2009. "Revachist City." In *The Encyclopedia of Urban Studies*, edited by R. Hutchison. Thousand Oaks: Sage.
- Sloterdijk, P. 2016. *Foams Spheres Volume III: Plural Spherology*. Los Angeles: Semiotext(e).
- Sloterdijk, P. 2014. *Globes Spheres Volume II: Macrospherology*. Los Angeles: Semiotext(e).
- Sloterdijk, P. 2011. *Bubbles Spheres Volume I: Microspherology*. Los Angeles: Semiotext(e).
- Smith, A. 2014. "Borrowing Public Space to Stage Major Events: The Greenwich Park Controversy." *Urban Studies* 51 (2): 247–63.
- Smith, A. 2017. "Animation or Denigration? Using Urban Public Spaces as Event Venues." *Event Management* 21 (5): 609–19.
- Smith, A., and I. von Krogh Strand 2011. "Oslo's New Opera House: Cultural Flagship, Regeneration Tool or Destination Icon?" *European Urban and Regional Studies* 18 (1): 93–110.
- Smithson, R. 1967. "A Tour of the Monuments of Passaic, New Jersey." *Robert Smithson: The Collected Writings* 69.
- Solnit, R. 2001. *Wanderlust: A History of Walking*. London: Verso.
- Spencer, S. 2011. *Visual Research Methods in the Social Sciences: Awakening Visions*. Routledge.
- Spinelli, Q. 2013. "Stura, Torino: Scenari per Una Diversa Urbanità." Politecnico di Torino DIST.
- Springgay, S., and S. E. Truman eds., 2017. *Walking Methodologies in a More-than-Human World: Walkinglab*. Abingdon and New York: Routledge.
- Srinivasan, K. 2019. "Remaking More-than-human Society: Thought Experiments on Street Dogs as 'Nature.'" *Transactions of the Institute of British Geographers*.
- Staehele L., D. Mitchell. 2008. *The People's Property? Power, Politics and the Public*. Abingdon and New York: Routledge.
- Stevens, Q. 2007. *The Ludic City. Exploring the Potential of Public Spaces*. Routledge.
- Stewart, K. 2007. *Ordinary Affects*. Durham: Duke University Press.

- Stewart, K. 1996. *A space on the other side of the road: Cultural Poetics in an "other" America*. New Jersey: Princeton University Press.
- Stoetzer, B. 2018. "Ruderal Ecologies: Rethinking Nature, Migration, and the Urban Landscape in Berlin." *Cultural Anthropology* 33 (2): 295–323.
- Stoler, A. L. ed., 2013. *Imperial Debris: On Ruins and Ruination*. Durham: Duke University Press.
- Stoller, P. 1997. *Sensuous Scholarship*. Philadelphia: University of Pennsylvania Press.
- Storm, A. 2013. *Post-Industrial Landscape Scars*. Basingstoke: Palgrave Macmillan.
- Sukopp, H. 2008. "On the Early History of Urban Ecology in Europe." In *Urban Ecology. An International Perspective on the Interaction Between Humans and Nature*, edited by J. M. Marzluff, E. Shulenberg, W. Endlicher, M. Alberti, G. Bradley, C. Ryan, C. Zumbunnen, and U. Simon, 79–97. New York: Springer Science and Business Media.
- Sultana, F. 2011. "Suffering for water, suffering for water. Emotional geographies of resource access, control and conflict". *Geoforum* 42 (2): 163-172.
- Sumartojo, S., and S. Pink. 2018. *Atmospheres and the Experiential World: Theory and Methods*. London: Routledge.
- Swyngedouw, E. 2006. "Metabolic Urbanization: The Making of Cyborg Cities." In *In the Nature of Cities*, edited by N. Heynen, K. Maria, and E. Swyngedouw, 36–55. Hoboken: Routledge.
- Swyngedouw, E. 1996. "The City as a Hybrid: On Nature, Society and Cyborg Urbanization." *Capitalism Nature Socialism* 7 (2): 65–80.
- Tafuri, M. 1968. *Teorie e Storia dell'architettura*. Roma: Laterza.
- Taussig, M. 2011. *I Swear I Saw This. Drawings in Fieldwork Notebooks, Namely My Own*. The University of Chicago Press.
- Ternavasio, M. 2014. *Crimea e Borgo Po Passato e Presente Della Precolina Torinese*. Torino: Graphot Editrice.
- Thibaud, J. P. and P. Pichon. 2017. "Animating public space? Between urban programming and citizen activation." *Ambiances* Retrieved from <https://journals.openedition.org/ambiances/687?lang=fr>
- Thibaud, J. P. 2011. "The Sensory Fabric of Urban Ambiances." *The Senses and Society* 6 (2): 203–15.
- Thibaud, J. P. 2001. "La Méthode Des Parcours Commentés." *L'espace Urbain En Méthodes*, 79–99.
- Thibaud, J. P. 2014. "Urban Ambiances as Common Ground?" *Lebenswelt. Aesthetics and Philosophy of Experience* 4: 282–95.
- Thompson, C. W. 2002. "Urban open space in the 21st century". *Landscape and Urban Planning* 60 (2): 59-72.
- Thrift, N. 2008. *Non-Representational Theory: Space, Politics, Affect*. Abingdon and New York: Routledge.
- Tilley, C., and K. Cameron–Daum. 2017. *An Anthropology of Landscape*. UCL Press.
- Tonnelat, S. 2008. "'Out of Frame'. The (in)Visible Life of Urban Interstices - a Case Study in Charenton-Le-Pont, Paris, France." *Ethnography* 9 (3): 291–324.
- Tornaghi, C, and C. Certomà eds., 2019. *Urban Gardening as Politics*. Abingdon and New York: Routledge .
- Truelove, Y. 2011. "(Re-) Conceptualizing Water Inequality in Delhi, India through a Feminist Political Ecology Framework." *Geoforum* 42 (2): 143–52.
- Tsing Lowenhaupt, A. 2012. "Unruly Edges: Mushrooms as Companion Species: For Donna Haraway." *Environmental Humanities* 1 (1): 141–54.

- Tulumello, S. 2017. *Fear, space and urban planning. A critical perspective from Southern Europe*. Cham: Springer.
- Urry, J. 2000. *Sociology beyond Societies. Mobilities for the Twenty-First Century*. Routledge.
- Van Eekelen, B., B. Stotzer, and A. Tsing Lowenhaupt eds., 2004. *Shock and Awe: War on Words*. Santa Cruz: New Pacific Press.
- Leeuwen, Theo Van, and Carey Jewitt. 2001. *The Handbook of Visual Analysis*. Edited by Theo Van Leeuwen and Carey Jewitt. Sage.
- Vanolo, A. 2015. "The Image of the Creative City, Eight Years Later: Turin, Urban Branding and the Economic Crisis Taboo." *Cities* 46: 1–7.
- Vanolo, A. 2015. "The Fordist City and the Creative City: Evolution and Resilience in Turin, Italy." *City, Culture and Society* 6 (3): 69–74.
- Vanolo, A. 2010. "Torino e La Costruzione Di Immagini Urbane." In *Di Capitale Importanza. Immagini e Trasformazioni Urbane Di Torino*, edited by M. Santangelo and A. Vanolo, 37–54. Roma: Carocci.
- Venturelli, E. 1960. *Urbanistica Spaziale: Integrazione Dello Spazio Nella Città*. Torino: Pozzo.
- Vergunst, J. 2010. "Rhythms of Walking: History and Presence in a City Street." *Space and Culture* 13 (4): 376–88.
- Viveiros de Castro, E. 2012. "Immanence and Fear Stranger-Events and Subjects in Amazonia." *Journal of Ethnographic Theory* 2 (1): 27–43.
- Wacquant, L. 2000. *Parola d'ordine: tolleranza zero*. Milano: Feltrinelli.
- Wacquant, L. 2007. "Territorial Stigmatisation in the Age of Advanced Marginality." *Thesis Eleven* 91: 67–77.
- Waldheim, C. ed., 2006. *The Landscape Urbanism Reader*. New York: Princeton Architectural Press.
- Walker, G. 2012. *Environmental Justice: Concepts, Evidence and Politics*. New York: Routledge.
- Wang, T. 2012. "Writing Live Fieldnotes: Towards a More Open Ethnography." *Ethnography Matters*.
- Wang, Z. 2014. "An Interview with Gernot Böhme." 2014.
- Waterton, E. 2013. "Landscape and Non-Representational Theories." In *The Routledge Companion to Landscape Studies*, edited by P. Howard, I. Thompson, E. Waterton, and M. Atha, 84–93. Abingdon and New York: Routledge.
- Weisshaar, B. ed. 2013. *Spaziergangswissenschaft in Praxis*. Berlin: Jovis.
- Wetherell, Margaret. 2012. *Affect and Emotion: A New Social Science Understanding*. Los Angeles: Sage Publications.
- Whatmore, S. 2002. *Hybrid Geographies. Natures Cultures Spaces*. Sage.
- Whatmore, S. 2017. "Hybrid Geographies: Rethinking the 'Human' in Human Geography." In *Environment. Critical Essays in Human Geography*, edited by B. Braun, 411–28. London: Taylor and Francis.
- Whatmore, S. 2002. *Hybrid Geographies: Natures Cultures Spaces*. London: Sage.
- Wheeler, S. M., and T. Beatley eds., 2014. *The Sustainable Urban Development Reader*. Edited by Stephen M. Wheeler and Timothy Beatley. London and New York: Routledge.
- Whyte, W. F. 1943. *Street Corner Society. The Social Structure of an Italian Slum*. Chicago: University of Chicago Press.
- Williams, R. 2008. "Night Spaces. Darkness, Deterritorialisation of Social Control." *Space and Culture* 11 (4): 514–32.

- Wolch, J. R., and J. Byrne. 2014. "Urban Green Space, Public Health, and Environmental Justice: The Challenge of Making Cities 'Just Green Enough.'" *Landscape and Urban Planning*, 125: 234–44.
- Wolch, Jennifer R., and Jody Emel, eds., 1998. *Animal Geographies: Place, Politics, and Identity in the Nature-Culture Borderlands*. London: Verso.
- Wooley, H. 2003. *Urban Open Spaces*. London: Taylor and Francis.