

WATERFRONT DIALECTICS

ROME AND ITS
REGION FACING
CLIMATE CHANGE
IMPACTS

Edited by:
Pedro Ressano Garcia
Claudia Mattogno
Bruno Monardo
Antonio Cappuccitti



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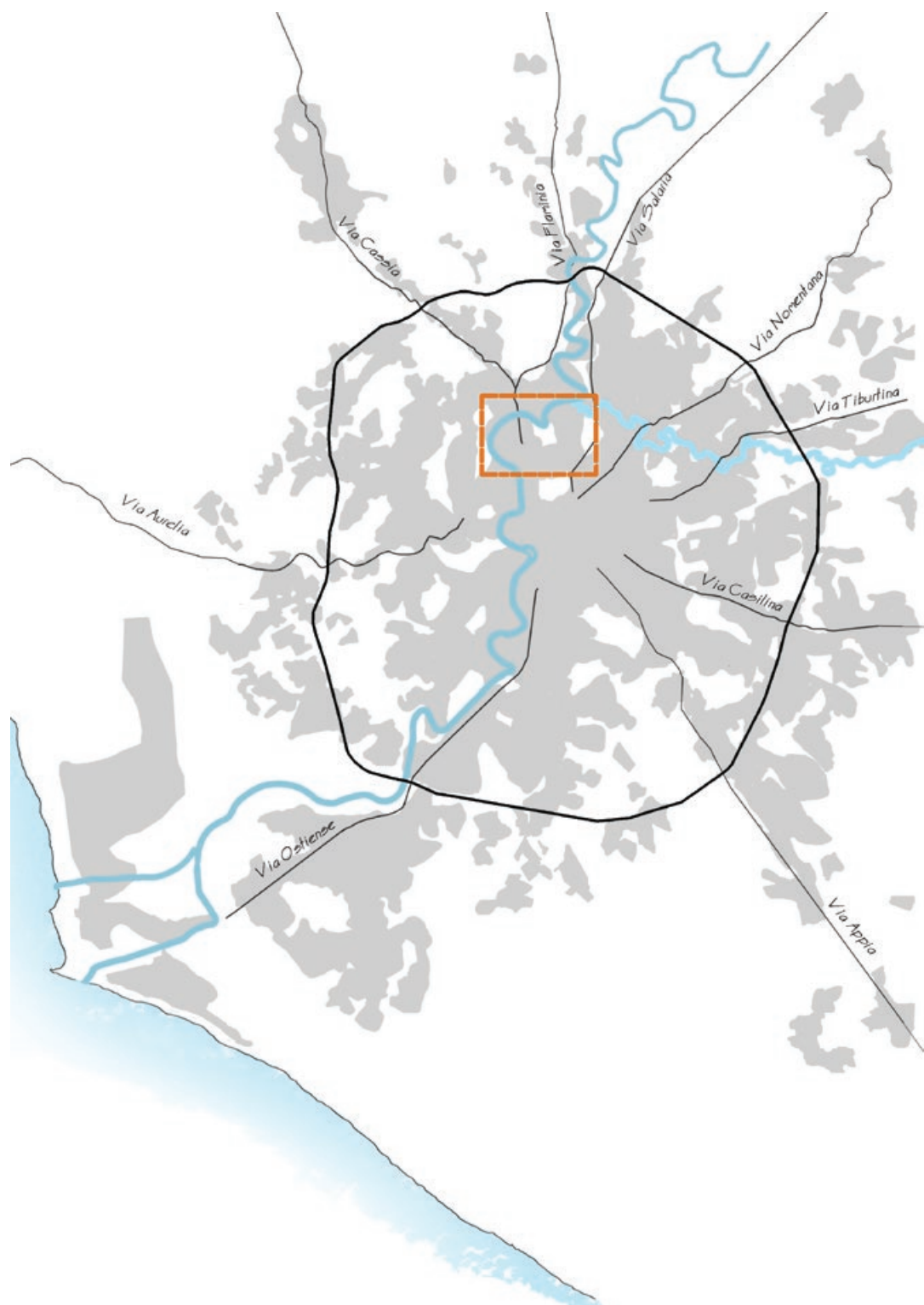
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Part 2.
Rome and the Tiber



Interpreting the River through Kaleidoscopic Glances

The Tiber is the history and memory of Rome. The Tiber is the beginning, the living witness of the incipit and the development of the city, the source from which its myths and identities spring. The Tiber is synonymous with the origins of Rome as water is synonymous with life. The river has always existed, since before the city, it is eternal.

The river which from the beginning of time has carved its meandering path through the alluvial plain of central Italy and especially of Lazio towards the sea, influenced the foundation and development of Rome. After the construction of the “muraglioni” the river runs isolated and disconnected from the life of the city core. And yet, the river is its backbone, its quiet centre which, with the powerful force of the water, at the same time calms and infuses energy. It drags along the fluid collective memory of the city: the river is always present, it is timeless.

Taking into account the complex problems affecting the contemporary waterfronts within the Climate Change phenomena, the glances by the authors of this second part are based on the belief that the dialectics between the *civitas* in its kaleidoscopic facets and the role of the city’s government institutions can become the main tool to bring out questions and debates, the stimulus to open new perspectives on the daily reality of the relationship between the “*Urbs*” and its river. The most famous myths and the humblest stories that intertwine along the Tiber are the catalyst and the source of inspiration for the authors’ visions that intend to reawaken the collective memory of the Rome synergies with the Tiber.

The first group of reflections highlights the historical approach that places in the foreground the deep relationship of the ‘Eternal city’ with its river. In fact, according to Servius, a Latin author who probably lived during the fifth century B.C., the city of Rome owns its name precisely to the Tiber. The terms ‘*Rumen*’ or ‘*Rumon*’, used by Latins to identify the river, share a similar root to Rome, and more specifically to the verb ‘*ruo*’ which means “to flow”.

Maria Margarita Segarra Lagunes recounts the Eternal City’s original symbiotic relationship with its river, which has become blurred over time. The legacy of frenetic port activities (from Portus Tiberinus to Testaccio, from the port of Ripa Romea to Ripetta) has been diluted by the decision to build the powerful Tiber embankments in order to permanently cancel flooding phenomena in the city. The significant wounds inflicted on the waterfronts of the historic urban fabric could be mitigated

through strategies that value the seductive advantage point of observing the urban landscape from the water level of the river, recovering and partly regenerating the lost landscape.

The recovery of urban fractures that often divide cities from their water systems and the concept of “affordance” is in the core reflections of Elena Battaglini. Within the intimate entanglement between places and urban communities, the “river affordance” symbolises and draws the relationship with the space morphology, provides the valuable identity and reminds the limits in terms of climatic events.

The historical reconstruction of the data about the major flood events of the Tiber system allows Guido Calenda and Corrado Paolo Mancini to reflect on the concept of modern approaches to the river defence design and works through the possibility to calibrate simulation models in order to reconstruct the peak inundation events in the past and manage the potential future hydraulic risks.

The second package of short essays develops reflections and critical remarks on the kaleidoscopic issues characterising policies, strategies, plans and projects carried on by the dialectics of an extraordinary numerous set of public authorities and other heterogeneous stakeholders in order to regenerate the quality of an amazing and at the same time decadent urban reality in recent times.

The role of the three macro-strategies (defence, adaptation, relocation) that explicate the ‘time factor’ in the short, medium and long term, respectively, for combating flooding risk phenomena constitutes the interpretative trigger on which Carmen Mariano’s reflections are developed within the framework of a research project financed by Sapienza University of Rome and developed with ENEA (Italian Agency for New Technologies, Energy and Sustainable Economic Development). The case study exploration of metropolitan strategic plans in Italian water cities (such as Genoa and Venice) in comparison with virtuous models in northern Europe (Rotterdam, Vejle) highlights how the issue of climate change and flood risk can provide a decisive contribution to planning innovation hinged on urban regeneration.

Irene Poli’s contribution develops the issue of blue and green networks as one of the most relevant approaches to pursue the urban resilience idea, both in terms of urban fabric ontology and environmental ecosystem dimension. Rome and its relationship with the Tiber hydrographic basin can represent the trigger of a

paradigm shift drawing inspiration from the experiences of terrific and amazing river park projects conceived and implemented in the last decade along the Manzanares and the northern Seine (Madrid and Paris areas, respectively).

The hydrographic system of Rome and the peculiar role of the Tiber axe represents one of the 'Strategic Planning Zones' in the General Master Plan of the City approved in 2008 and still in force, as Chiara Ravagnan reminds to the reader in her reflections. The strong relationships between the urban historic pattern and its waterflow axe, which have been neglected with the construction of the powerful embankments soon after Rome became Capital of the Italian Kingdom, can be at least partly revitalised through the implementation of the Tiber 'Ambito Strategico' regenerating the river banks as continuous, resilient, flood adapting public space ribbons strengthening "the morphologic and perceptive relationships with the historic architectures and urban axes".

Hydrogeological Structure Plans of river basins are designed to guarantee the best compatibility between the expectations of use and development of the territory and the natural hydro-geomorphological dynamics of the basins, in compliance with environmental protection and the safety of populations, settlements and infrastructures. The hydro-geo hazards of the Tiber basin, especially the urban section from Castel Giubileo to the river mouth (the well-known 'PS5 Plan') are presented and discussed by Fernando Nardi and Antonio Annis.

With the aim of reconnecting Rome to the Tiber, rebuilding and improving the millennial relationship between the city and its river, the Plan also addresses the issue of the floodplains use, seeking the virtuous balance between the protection constraints and the public use intentions. Looking at the wider context of the river corridor, given the particular urban, environmental and historical configuration, the main aim is the valorisation of the integrated system 'Tiber River Park'.

The challenges posed by Climate Change on the urban water systems can be addressed through the River Contracts, useful agreements for the regeneration, management and enhancement of territories characterized by the presence of a complex water system. River Contracts are part of a wider set of tools referring to different categories of water bodies: coasts, lakes, transitional waters, estuaries and groundwater. Luna Kappler's reflections argue about the original path of Roman River Contracts, to be understood as the outcome of an integrated inclusive decision-

making process, which allows to undermine the traditional forms of water management based on top-down hierarchical relationships, and to overcome their strictly technical and sectoral character. On the basis of a voluntary agreement, the River Contracts mobilise the participation of a huge number of players in the river area towards the definition and implementation of a shared strategic framework.

The public space evolution, within the Tiber context, is focused by the critical remarks of Federica Dal Falco, starting from the ecological paradigm shift imposed on contemporary urban settlements by the Climate Change issues and their powerful impacts. The author argues about the porosity of the border concept in the urban realm and, taking inspiration from the general principles ('beautiful', 'sustainable', 'together') conceived by the New European Bauhaus policy, reflects about the potential of the Tiber, as the main axe of the 'Eternal city', to recover the full identity of public space "par excellence" which in the past had privileged and direct relationships with the urban fabric and its edges. Within the Rome General Master Plan in which the Tiber ribbon is identified as a specific 'strategic zone', the regeneration of a complex system of collective 'hot spots' at different scales could be organised around the necklace of historical and more recent bridges, new "inclusive public space that integrates social aspects with knowledge of cultural heritage".

The urbanization process of 'Flaminio' and 'Villaggio Olimpico' neighbourhoods is synthetically reconstructed in the following text by Bruno Monardo. The author's reflections highlight the original vocations of the area as a remarkable space for leisure, arts, culture, infrastructures; since the beginning of the XIX Century the Valadier project of Villa Napoleon has focused the quality of space in the bight of the river for leisure and outdoor activities immersed in a valuable natural-vegetational context punctuated by historic gardens and amenities.

Over time, the growing exaltation of 'Flaminio' as a concentration of extraordinary cultural equipment and services representing identity polarities for the whole city has added to the vocation of leisure. As demonstrated by the recent initiatives for new cultural spaces conveyed by the public administration (Maxxi addition and new Science Museum), the Flaminio embodies the role of a strategic neighbourhood for the regeneration of the hinge fabric between the historic centre and the northern quadrant of the consolidated city, with attempts

to rethink the waterside and, at the same time, explore new relationships with the natural and mineral river ribbons.

Finally, Francesca Rossi's reflections focus on the theme of the urban landscape that the river allows us to discover in its naturalistic and anthropic facets suggested by unusual visual perceptive cones. Moving gently on the various navigable stretches of the Tiber, the landscape offers a palimpsest of crisscross relationships with unexpected and surprising perspective views. The richness of the flora and fauna components of the river area north of Castel Giubileo and south of the Magliana up to the mouth is striking, a naturalness that contrasts with the invasive presence of the "muraglioni" in the denser historical fabric. The perception of historical stratification finds a privileged perceptual condition in the vision "at the water level, walking on the banks or rowing", revealing the fascinations and the most captivating potential for reconquering the identity of the collective space in the relationship between water and urban community.

Waterfront Dialectics.
Rome and its Region Facing Climate Change Impacts
Edited by: Pedro Ressano Garcia, Claudia Mattogno,
Bruno Monardo, Antonio Cappuccitti

direttore editoriale: Mario Scagnetti
editor: Marcella Manelfi
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One of the most complex discussions concerning climate emergency is the sustainable water management. How to deal with the risks generated by climate change where the presence of cultural and environmental assets is highly stratified over time?

How to manage large densely populated areas rich in environmental and human resources, ensuring their protection and development? It's now time to integrate the connections between the different territorial scales and to ensure the balance between public and private interests in a framework of sustainable strategies.

SOS Climate Waterfront is an interdisciplinary project that aims to explore waterfronts in Europe that are facing climate change. The volume presents the results of the workshop held in Rome in spring 2022.

