

PROCEEDINGS
of the
INTERNATIONAL CONFERENCE
on
CHANGING CITIES IV
Spatial, Design, Landscape & Socio-economic Dimensions

Department of Planning and Regional Development, University of Thessaly
Laboratory of Urban Morphology and Design

in collaboration with
School of Architecture, Technical University of Crete and Regional Authority of Crete.

Under the aegis of
THE GREEK MINISTRY OF ENVIRONMENT AND ENERGY

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University of Thessaly

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PREFACE

Dear colleagues,

The 4th International Conference on “*CHANGING CITIES: Spatial, Design, Landscape & Socio-economic Dimensions*”, Chania, Crete Island, Greece, 24-29 June 2019, is now a reality and a big academic event. The conference has been organised by The Laboratory of Urban Morphology & Design, Department of Planning & Regional Development, University of Thessaly, Volos, Greece, in collaboration with School of Architecture, Technical University of Crete and Regional Authority of Crete, and under the aegis of The Greek Ministry of Environment and Energy.

The series of *CHANGING CITIES international conferences [CCC]* has started in 2013 by The Laboratory of Urban Morphology & Design, Department of Planning & Regional Development, University of Thessaly, Volos, Greece, and has so far delivered three conferences:

- *CHANGING CITIES I: Spatial, Morphological, formal and socioeconomic dimensions*, 18-21 June 2013, Skiathos Island, Greece.
- *CHANGING CITIES II: Spatial, Design, Landscape and socioeconomic dimensions*, 22-26 June 2015, Porto Heli, Peloponnese, Greece.
- *CHANGING CITIES III: Spatial, Design, Landscape and socioeconomic dimensions*, 26-30 June 2017, Syros Island, Greece.

All three conferences have been welcome by the academic community of planners and architects worldwide attracting over 300 presenters from more than 50 countries.

The CC conferences are always taking place in Greek venues with characteristic urban or/and natural landscape like the Greek islands in the Aegean Sea. The 4th conference has been decided to take place in Chania, Crete Island, since Chania is the most attractive town in Crete Island exhibiting a well-preserved Medieval and Renaissance historical core with a unique Venetian harbour, built between 1320 and 1356.

The series of CC conferences covers a vast spectrum of fields related to the present and future challenges of cities. In the last decades, we have all witnessed a series of dramatic, universal changes and developments affecting cities – their morphology, environment, economies, and societies. Global new conditions such as economic globalisation, European integration and the creation of urban networks and hierarchies; post-industrial economies of culture and new technologies; consciousness of environmental degradation and the necessity of green design, sustainable development, and resilient cities; the development of informational societies, the increasing mobility of individuals, 'space-time' compression, and the emerging smart cities; growing terrorism attacks and new security infrastructures of public spaces; increasing migrations and cultural diversity of individuals, and coexistence in multi – ethnic and multi-cultural urban societies. In this new milieu, cities change themselves to ad hoc adapt into new conditions while simultaneously scholars and practitioners in urban planning and design, and urban policy-makers attempt to change cities so as to better fit into new conditions.

The series of CC conferences aspires to bring together urban planners and designers, spatial planners, architects, landscape designers, urban geographers, urban economists, urban sociologists, and urban policy makers, and investigate all together new challenges concerning cities and their future. The main aim is providing an international forum of transaction of ideas on changing cities.

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The 4th CC conference focuses on two topics:

1. **“SMART CITIES; Smart Environment, Smart Mobility, Smart Economy”**
2. **Planning and Designing new cities in China.**

First, strategic development of smartness in cities is a fast growing field of great academic and policy-making interest, based on the development of new technologies in the services of inhabitants, visitors, tourists, entrepreneurs, et al. Therefore, it is a big challenge for all urban planners, designers, urban economists, and urban policy makers.

Second, China is a huge country with fast growing economy in the industrial sector. This gradually fuels national migration flows of millions of people from agrarian Chinese regions to urban districts, creating a large demand of housing. New large cities are planned, designed and developed in China in the last decade. Since Europe has been shrinking in demographic terms during the last three decades, there is no need for new cities. In this framework, all new schools of thought in urban planning and design are applying new ideas in China – attracting the interest of academia. The Organising Committee is proud to have arranged for the 4th CC conference, important special sessions devoted to Chinese cities:

- (a) **“Planning & Designing new cities in China”**, pre-organised by Dr. Huang He, Associate Professor, School of Architecture, Tsinghua University, Beijing, China,
- (b) **“Chinese Cities: Urban development, socio-economic transformations, policy challenges and comparisons with the European experience”**, pre-organised by Prof. G. Petrakos, University of Thessaly, and Prof. Geoffrey Qiping Shen, The Hong Kong Polytechnic University.

The conference thematic fields include the following:

- *Urban Design in Planning,*
- *Sustainable Urban Planning & Development,*
- *Urban Landscapes, Landscape Planning & Design,*
- *Urban Cultures & Public Open Spaces,*
- *Historical Centres & Built Heritage Management,*
- *Environmental Urban Planning,*
- *Cities & Health*
- *Resilient cities,*
- *Transportation Planning and Policy in cities,*
- *Urban Planning Laws, Real Estate & Property Rights,*
- *Urban Economies & spatial impacts,*
- *City Branding and Urban Tourism*
- *Shrinking cities,*

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- *Divided cities,*
- Migration, multinational and multicultural societies & Urban Planning.

The 4th CC conference has initially attracted 485 abstracts, and 186 research papers (optional submission to the conference E-Book of Proceedings). In the final conference program, there are 328 oral presentations and 22 poster presentations from all over the world; from Greece and the Balkans, Northwest Europe, USA, Latin America (Brazil, Chile, Colombia, Mexico), Middle East and North Africa, Asia, Far East (China and Japan), and Oceania (Australia, New Zealand, New Guinea). The 4th CC conference is really international since 42% of the presenters are Greek academics and 58% of the contributors are from global academia.

I would like to thank

- the Organising Committee;
- the keynote speakers;
- the scientific Committee of the conference for reviewing work, and especially the colleagues who pre-organised special sessions for the conference;
- the academic supporters of the conference: University of Thessaly; Technical University of Crete, School of Architecture; and The Greek Ministry of Environment and Energy.
- the financial sponsors of the conference: Regional Authority of Crete, Green Fund of The Greek Ministry of Environment and Energy;
- and especially, all of you having contributed to this big academic event.

Aspa Gospodini, PhD

Professor of Urban Planning & Design,
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Chair of the Organising Committee & the Scientific Committee
of the series of CC conferences.

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KEYNOTES SPEECHES



Streetscape for healthy life

Sapienza university and the urban regeneration of the city of Rome

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Abstract

The road as a meeting place for public life seemed to have ended in oblivion. The urban culture had decreed its death, first with the apodictic proclamations of Le Corbusier, who in fact only thought to separate the pedestrian and vehicular flows and to create roads inside buildings and buildings in the form of streets. Then, in the cybernetic age and in the era of the celebration of "non-places", contemporary life seemed destined to remain confined in virtual squares animated by social networks or in the shopping centers. In reality, the road is still today not only the theater of everyday life but also the site for experimentation, the setting for cultural events and for the performance of sustainable and healthy lifestyles. Academic institutions, especially in Europe where the campus is part of the city texture, are often engines of urban regeneration, capable of revitalizing entire districts of the city, having an impact on the shape and the role of the streets.

Keywords: streetscape; university campus; lifestyle; health.

1. INTRODUCTION

The road as a meeting place for public life seemed to have ended in oblivion. The urban culture had decreed its death, first with the apodictic proclamations of Le Corbusier, who in fact simply thought to separate the pedestrian and vehicular flows and proposed a new urban imaginary to create roads inside buildings and buildings in the form of streets. Then, in the cybernetic age and in the era of the celebration of "non-places", contemporary life seemed destined to remain confined in virtual squares animated by social networks or in the shopping centers. In reality, the road is still today not only the theater of everyday life but also the site for experimentation, the setting for cultural events and for the performance of sustainable and healthy lifestyles. Academic institutions, especially in Europe where the campus is part of the city texture, are often engines of urban regeneration, capable of revitalizing entire districts of the city, having an impact on the shape and the role of the streets.

One of the focus of the contemporary debate concerns the role that public space can play in the enhancement of the city and in influencing our spontaneous behavior, inducing an active life.ⁱ Introducing physical activity as part of our daily displacements has in fact positive effects on our health and on the public expenditure, and among the lines of action identified by the city administrations, pedestrianism is at the first place. The incentive to a less sedentary life and to the daily practice of physical activity cannot be encouraged only through warnings or prohibitions. Regular exercising implies a systematic strategy of recurrent journeys (home-work-other daily activities) which needs to be performed through networks of pathways. It is important therefore going back to the conception of the structure of the road, or as we say with a more fashionable Anglo-Saxon

term, to the *streetscape*, which means thinking about how architecture, green areas, open spaces, the property regime, accessibility and permeability shape the urban space and how the inhabitants live it and make it vital.

All over the world noteworthy projects of urban enhancement for the development of pedestrian and bicycle networks have been implemented. These realizations are aimed at introducing cities' regeneration that encourages the possibility of outdoor activities for the promotion of correct lifestyles and sustainable transportation corridors, as well as the increasing of green and resilient spaces. From the creation of the universally known scenic garden of the Highline, inspired by the beauty of industrial ruins and a spontaneous vegetation ecosystem that has transformed the citizens' lifestyle by promoting an active use of the recuperated urban spaces of the old railway track of the Meatpacking district in New York, several interesting and analogous realizations have been completed.



Figure 1. Invest Atlanta, Atlanta Beltline, Atlanta (Usa), 1999-2030

In North America, the vast Atlanta beltline (Fig. 1) is a 22 mile long anular track that runs on the dismissed railway and connects 45 neighbourhoods with pedestrian and cycle paths, parks and green spaces: this project has the aim to help the city to become more resilient to socio-economic challenges by creating an inclusive transport system, interesting and accessible public spaces, job creation.



Figure 2. Michael Van Valkenburgh Associates, The Chicago 606 in Chicago (Usa), 2014

In Chicago the 606 elevated railroad line (Fig. 2) was transformed into a linear park and a multi-purpose bicycle trail, providing a unique new community connection that stretches 2.7 miles. The project designed by Van Valkeburg associates is a raised landscape with inspiring views that intersects multiple neighborhoods. The Framework Plan builds on the potential this area creates for uninterrupted travel within the city through designated bike lanes and slower pedestrian experience, supported through perimeter plantings and generous seating and viewing opportunities.



Figure 3. B+ABR, J. P. Backheuser, I. Riera Arquitetos, Luiz Paulo Conde Waterfront Promenade in Rio de Janeiro (Brazil), 2016

In South and Central America, the Luiz Paulo Conde Waterfront Promenade in Rio de Janeiro (Fig. 3) is instead the re-appropriation of an area obtained following the demolition of a large viaduct. The redevelopment of abandoned industrial buildings along the waterfront has given to the city an important system of public spaces reconnecting the center with the sea. The promenade builds a renewed quality of waterfront soil and encourages urban movement and well-being.

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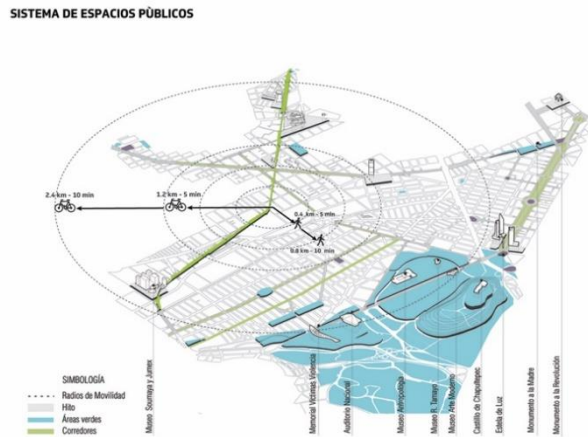


Figure 4. Gaeta Springall Arquitectos, Linear park of the Cuernavaca Railway in Mexico City (Mexico), 2016-2018

The Linear park of the Cuernavaca Railway in Mexico City (Fig. 4) by Gaeta-Springall is a green system that envelops railway tracks transformed into spaces dedicated mainly to sport and playing activities. The Cuernavaca Railway Avenue, with its history and strategic position inside the city and the neighborhoods it crosses and connects, created the opportunity to create an urban forest of 4.5 km long that, at the same time, builds city and public spaces, generates community spirit and contributes to the feelings of appropriation and empowerment of neighbors and users from this part of the city. Urban forests are in fact qualified spaces with numerous environmental and social advantages. The architects were not looking for the creation of a finished project, rather, they wanted to generate a project direction that could implement other actions. A list of 70 projects and actions can be realized through the participation and opinion of the different social actors, achieving community appropriation and empowerment.



Figure 5. Global Arquitectura Paisagista, Cycle Path along the Tejo River, Lisbon (Portugal), 2009

In Europe, we can recall the new strategy of a cycling network developed by the municipality of Lisbon, that has in particular along the Tejo River (Fig. 5) with the 7362 meters long project of João Gomes da Silva, a strenght point. The heterogeneity of spaces and environments, the proximity and crossing of several industrial and monumental sites drove the designers to approach this place with caution and sobriety and to respond with different solutions. The goal was to define a new urban environment beyond the bikeway, in order to improve this area along the river.



Figure 6. Dissing + Weitling, M. Levinsen, The bicycle snake, Copenhagen (Denmark), 2014

The seminal case of Copenhagen (Fig. 6) with its huge investment, since 2010, to transform the city into a bicycle-friendly space is very well known and the bicycle snake is only one fragment of a vast operation that comprehends many interesting and multifaceted projects concurring to the goal of making a sustainable city. The whole Öresund Region aims to be a Living Labⁱⁱ in terms of sustainable transformations developing attentive and resilient solutions able to face issues such as ecological transportation and climate change. A systematic and strategic attention to the creation of quality urban spaces, with green areas and good public transportation aimed at favouring pedestrian and cycling environments, has completely transformed the danish capital into one of the most convenient and pleasant cities to live in. As Jan Gehl states:

“In a Society becoming steadily more privatized with private homes, cars, computers, offices and shopping centres, the public component of our lives is disappearing. It is more and more important to make the cities inviting, so we can meet our fellow citizens face to face and experience directly through our senses. Public life in good quality public spaces is an important part of a democratic life and a full life”ⁱⁱⁱ

2. THE ITALIAN UNIVERSITY CAMPUS AND ITS RELATIONSHIP WITH THE CITY

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Nowdays, European universities are an important reality in the economic and physical development of cities and involve a wide audience, as the number of students enrolled in higher education worldwide will reach 262 million in 2025.^{iv}

The first universities were born in the mid-twelfth century in Paris and Bologna, urban centers ordered by the municipal regime that became fervent places of culture and education. In these places, according to the typical medieval custom of the corporations, all those who practiced the same activity grouped themselves in a certain part of the city fabric, creating a condition of sharing dynamic and vital services and structures. This model spread rapidly in Europe and still today strongly characterizes the universities of the old continent which, unlike the Anglo-Saxon and North American universities, are widespread in the cities and not isolated from them. According to this settlement model, which has only partially evolved over time, universities and cities live on an ongoing dialogue that is the essence of a complex cultural, educational and research network. For these reasons, especially in Europe, they are often engines of urban regeneration, capable of revitalizing entire districts of the city due to the presence of structures that can have a dialectical role with the urban context and thousands of people who study and work in these institutions every day generating staeelite activities.

In reality, although universities in Italy have also produced autonomous settlements, they have tended to favor systems that are complementary to territorial realities and the university has always had an important role in the transformation of the city, so that entire parts of historical nuclei can be identified as "campus" university. In Rome, during the Fascist regime the new Sapienza complex was built which, although closely related to American models, was an actual addition to the urban fabric, known as the *Città Universitaria*. In fact, as has been noted, the University City is a new interesting modern and original concept, not to be confused with the medieval "university district" or the American campus. Its origin lies in the regulating plans of modernity that met the principles of urban zoning and will be widely applied in Italy throughout modernity. These are complexes that included in addition to buildings for education, those for administration and services for the collective life of students, and were configured as a real part of the city and not as a place detached from it. It is indeed difficult to distinguish in the Italian cities the context of the university structures from that of the city, so much that we speak of an "Italian campus" typology to indicate the complementarity, the overlap, the integration that exists between the city and the academic environment.

The most interesting element of these ancient and new forms of settlement in Italian universities is the texture of open spaces, the main characteristic feature of the university life "which is far more important than the buildings themselves". This connective space, typical of the historic European city, will instead be expressed as "university in a garden" in the case of Anglo-Saxon and above all American campuses. In one case and another, open space is the distinctive element of these complexes and what makes them "universities". The space in which we meet, we live collegially. In this sense, the new role that the University has today in "protecting and enhancing local diversity" can only be aimed at generating forms of redevelopment of open spaces and reuse of abandoned structures in cities in the urban fabric, confirming and reinforcing that vocation to community life, which is the main quality of the university.

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3. SAPIENZA UNIVERSITY AND THE CITY OF ROME: STREETSCAPE FOR HEALTHY LIFE

In this sense, the design experimentation that we are pursuing through a research entitled "The city as care and the care of the city" on the widespread campus of the main Roman university is interesting. Sapienza University in Rome is in fact the largest university in Europe with its 129,500 students and is a structure born in 1303. In the XVII century the new headquarters were built in the historic center by Borromini. In the area of Castro Pretorio, the *Città Universitaria* designed by Piacentini was built in 1935, built - as we said - with a modern and original concept. Nowadays the university branches out in the districts of San Lorenzo, Nomentano, Flaminio and other more peripheral areas of the city, such as Grottarossa and Pietralata. Being frequented daily by a high number of people (students, professors, administrative staff, visitors) it represents an interesting case study to think about the possible modifications to be introduced in the Roman urban fabric to encourage a higher quality of open spaces and at the same time a less sedentary lifestyle. It is a noteworthy situation to generate systemic actions in the city texture and to reason about the relationships between building plot, roads and green infrastructures. This means taking care of spaces and people by encouraging journeys on foot or by bicycle, activating the presence of spaces for sport and free time intertwined with the pathways, redeveloping potentially usable left over green spaces, enhancing natural networks, creating a model of operational experimentation with a strong systemic character.

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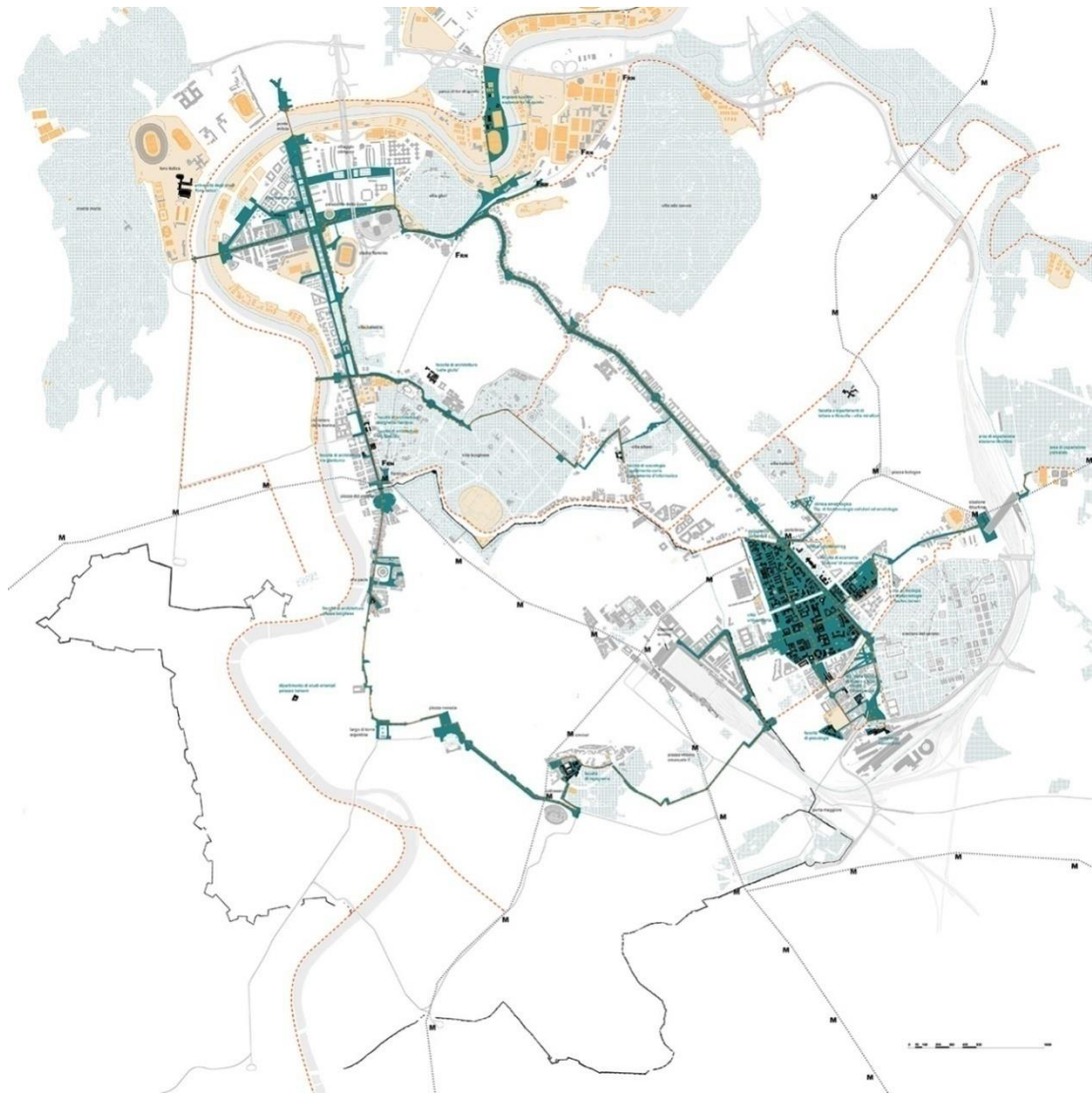


Figure 7. “La Sapienza della cura urbana”, Rome (Italy), 2019

Research group: Principal Investigator A. Capuano; **Team** G. Celestini, A. Criconia, A. Giovannelli, L.V. Ferretti, F. Toppetti; **With** A. Lanzetta, A. Valeriani; **Collaborators** I. Cellini, S. Damiano, D. Frediani, M. Gilistro, D. Navarra, M. Sarlak, E. Tomassini, A. Veisz.

The project takes as reference some of the examples quoted at the beginning of this essay, in order to introduce urban enhancement for the development of pedestrian and bicycle networks that can serve the university users and the entire city population. The research project identifies three main areas of work:

- a. The reconfiguration of the open spaces of the Main Campus and of the Policlinic and the creation of pedestrian and cycle paths that connect north-south the Campus area to the Marco Polo building through the San Lorenzo district and east-west from Termini to Tiburtina station crossing all the major university facilities.

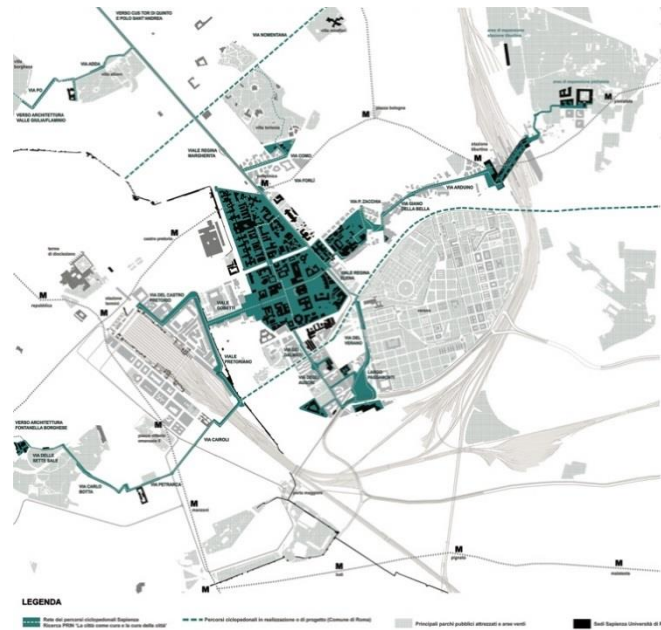


Figure 8.“La Sapienza della cura urbana”, Rome (Italy), 2019

Polyclinic, Main Sapienza Campus, San Lorenzo and Nomentano neighbourhoods

- b. The reorganization of the connections between the various Sapienza structures located in the Flaminio district.



Figure 9.“La Sapienza della cura urbana”, Rome (Italy), 2019

The Flaminio neighbourhood

- c. The Sapienza sports’area at Tor di Quinto on the Tiber and the Grottarossa area with the Sant’Andrea hospital.



Figure 10. “La Sapienza della cura urbana”, Rome (Italy), 2019

Tor di Quinto and Grottarossa neighbourhoods

4. CONCLUSIONS

A new strategy of a cycling and pedestrian network is developed to transform the city into a bicycle-friendly space. By assuming health as a parameter to encourage a more active life the research project aims on two main goals:

1. The reconfiguration of public space in some privileged pathways and city nodes, in correspondence with the university facilities and the main subway stations (or public transport), with the aim of favoring connections within the neighborhood.
2. The use of residual spaces and green infrastructures, with potential ecological network functions, to equip spaces that favor active life outdoors, introducing qualified spaces with several environmental and social advantages.

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ⁱThis paper offers some results of the on going PRIN research undergoing in the Department of Architecture and Design of Sapienza University of Rome: “The city as cure and the cure of the city”, principal investigator: Alessandra Capuano; team: Gianni Celestini, Alessandra Criconia, Anna Giovannelli, Laura Valeria Ferretti, Fabrizio Toppetti; grant holders researchers: Alessandro Lanzetta, Andrea Valeriani; <https://www.curacitta.com/sapienza-diap>

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ⁱⁱⁱJan Gehl, *Public Spaces & Public Life*, 1996.

^{iv} See also A. Capuano, “L’expérience italienne de l’intégration entre tissu historique et université” in *L’université et la ville. Évry, stratégies pour un modèle de partage* edited by L. Costes, M. Ghorayeb, P. Marmen et P. Poullaouec-Gonidec, Paris, Ed. La découverte- Carré, 2019.