

Cities' Identity through Architecture and Arts

Editors

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CITIES' IDENTITY THROUGH ARCHITECTURE AND ARTS



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Preface

Intended to be a guide for academics, scholars, and interested leaders, this book was designed to critically assess issues related to architectural identity, the city as a scene, the city as an organism, the city as a subject, and the planning or rather approaching of one.

A pressing issue for many researchers in the field, the book discusses the negative repercussions resulting from globalization. Studies have indicated that globalization, despite all the positive effects, has resulted in a loss of identity within a city. As a city develops over time, its identity is evolving as well and may even be lost due to rapid and constant changes it is subjected to. Discussed as well are examples and tendencies in dealing with urban identities as well as the transformation of cities and urban cultures mentioned in terms of form, identity, and art.

This book is a combination of innovative research submitted to a conference on Cities' Identity Through Architecture and Arts (CITAA) whereas scholars from all over the world gather in one venue to discuss cultural, historical, and economic issues of the city. Thus, the book offers a collective and global solution that is applicable on a universal level.

The research presented in this book was conducted by authors, or rather participants of the conference from, three different continents of the world and organized by IEREK. It was a distinct opportunity for them to share their thoughts with leading scholars and professionals in the field of Architecture, Arts, and Planning.

The research and materials in this book are directed at those who are actively engaged in the decision-making processes and to a heterogeneous audience who has an interest to critically examine all the new literature available in the field.

A special word of thanks should be made to the editors of this book and to all the authors and co-authors of the chapters who collectively provided the academic community with unique and increasingly valuable literature.



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IEREK takes distinct pride in being an institution that amasses a highly qualified and competent team who restlessly worked for months to make this conference what it is today. With regards to the success of this conference, any step forward towards the ultimate goal of creating a well-rounded society was made possible by the highly reputable scientific committee that worked competently to prepare for and revise research papers. It would also like to thank all the members of the Scientific Committee who made it their duty to help this institution spread knowledge to the masses.



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Architectural identity and globalization

Architecture



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The urban regeneration of the peripheral areas. The case study of Tor Vergata (Rome, Italy)

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ABSTRACT: The ‘Urban Regeneration of Peripheral Areas’ workshop experimented with an innovative design model for the urban regeneration of Rome. The working method of the workshop is based on diachronic analysis of the evolution of the combined natural history and culture of the area, the architectural, technological, environmental and landscape situation and relationship with the surrounding territory. The workshop dealt with the mutual relationships, which run through and characterise the dimensional and relational scales of the environments of metropolitan ecosystems as structures and landscapes. The strategy for urban and territorial integration is left to the procedures and policies of the community activism organisations and the administration because only they play central roles in the implementation of the design proposal. Even in the most critical cases it is possible to regenerate the outskirts, preserve their value by transforming them with the integration/recombination of their components and oppose the shared project of an urban landscape with an increasing number of buildings outside the proper context appropriate to their socio-cultural identity.

Keywords: Urban Regeneration; diachronic analysis; landscape; architecture; metropolitan ecosystems

1 INTRODUCTION

On Friday 14th October 2016 the ‘Urban Regeneration of Peripheral Areas’ workshop at the “Roma Tre” University came to an end. This workshop experimented with a new sustainable urban regeneration model for the case study of Tor Vergata in Rome. The area has been recommended by the Olympic Committee for the construction of the Olympic village as part of the candidature of Rome for the 2024 Olympic Games where the great works for the 2009 World Aquatics Championships had been started and then abandoned. The workshop was directed by Ferdinando Trapani and started on the basis of the scientific contributions of Maria Luisa Germanà and Giuseppe Di Benedetto. Maurizio Petrangeli led the work group with the help of Chiara Tonelli and Nabil Mohareb. Luciano de Bonis produced a study of the historic, environmental and regional situation together with the tutors Barbara Cardone, Nicola Moschena, Francesca Giangrande, Michele Porsia and Stefano Simoncini. Mieke Oostra, Adolf Sotoca and Ibrahim Maarouf took part in the discussion and final assessment.

2 THE ARCHITECTURE DESIGN AND URBAN PLANNING INTEGRATION DEBATE

The Tor Vergata district is a symbolic and exemplary case on account of the various topical questions arising in the debate on the contemporary city undergoing transformation. It is an area in the outskirts of Rome, definable and recognisable as a fragmentary, dispersed and weak area but at the same time also dynamic and open to a new morphological and urban identity. The meaning of “the territory of architecture” (Gregotti, 1966) must be extended as in this case study there are several vantage points because the approach to the subject of urban regeneration of extensive metropolitan outskirts must necessarily be interdisciplinary. In these multiple ambits, the architecture modifies the relationships of meanings of the physical space which once again becomes a place opposed to the idea of terrain vagues: a space which is unbounded, of a hereditary disposition and morphologically vague (Augé, 2004; Gregotti, 2013). The combined architecture-town planning concept, (Samonà, 1975) which interprets the complex construction of physical space in the transformation process of urban settings by radical regenerative actions, comes again to the fore.

Architecture reconsiders the themes connected with the “form-content” relationship and reassesses the interweaving of relations as “connective tissue of the content and form of the results of the same process” (Samonà, undated). The combined architecture-town planning concept makes it possible to include the cultural, social and political interactions that control the physical configuration of every transformation. The renewed unification of urban architecture and building architecture has more sense, since it assimilates the very idea of the city with the place, with the environment and with the manmade landscape. Architecture affects the entire setting on which it aims to confer aesthetic value and can be understood only considering all the dimensional scales. It is preferable to speak of reclamation and redevelopment rather than a new process since these activities are related to the existence of values produced by a possible regeneration in the urban dimension (Gregotti, 2011; Ricci, 2011). Architectural-town planning design operates continuously through various scales and reconnects the fractures in the periurban and infrastructural landscapes of the contemporary city.

Urban outskirts are sometimes transformed through horizontal development with dissemination of buildings over vast areas (OMA—Rem Koolhaas; Villette Park; Melun Senart; Bernard Tschumi and the “office park” covering more than 200 hectares at Chartres; Jean Nouvel with the “Active city” of Nîmes). In other cases it is vertical condensation of buildings that prevails in order to free as much ground as possible and strengthen the open structure character as in the Atlanpole of Nantes (Di Benedetto et al., 2017). Gregotti, Battisti, Gabetti, Isola and others base the architectural strategy on the enclosure archetype or principles of initial anthropisation (Busquets in the outskirts of Grenoble or the headquarters of Fiat by Gabetti and Isola in Candiolo), in an attempt to give character to the places by delimiting them and giving the design a founding role.

This peripheral city can no longer be interpreted in terms of finished parts. The “unfinished” condition results in the need for an empirical approach based on reconstruction and regeneration of the incoherent and morphologically weak building forms. Reflection on the architecture of this city, which started in the 1990s, adopted geographical and socio-political approaches (Lanzani, 2003) without viewing the project as an instrument for examining and becoming acquainted with spatial transformations (Torricelli, 2012).

3 URBAN IDENTITY BY THE BUILT ENVIRONMENT: THE INCOMPLETENESS OF THE PERIPHERAL AREAS

‘Urban identity’ represents a decisive and extremely concise factor in regeneration, both as an analytical focus and a design objective for works in historic town centres, outskirts, disused areas or residential districts (Lo Piccolo, 1995). Even if the regeneration processes are driven by an organic view of cities in continual evolution and typically have resilience in dealing with the many critical aspects of the question, there is a need for clear and shared guidelines. This

does not imply the need to differentiate between approaches and strategies for the parts of the contemporary city that were developed in different periods, but rather to be able to adapt them to the specific circumstances of regeneration (Germanà, 2013/a; Trapani, 2016). Numberless portrayals, of an artistic, scientific, essayist and literary nature, comment on the ambiguous character of the outskirts, anonymous places perennially waiting for a meaning, no longer countryside and not yet city, where “a kind of environment resignation,, a daily familiarity with the unfinished, which makes even thoughts incomplete” (Fois, 2015, 194) seems to have concentrated. A similar characteristic which can be found in any outskirt takes on a special meaning in the case of Tor Vergata, characterised by the City of Sport (also known as the “Sails”) designed by Santiago Calatrava and never completed. For this reason some considerations on the incompleteness in the field of the Architectural Heritage (Germanà 2015/a; 2015/b) can be reviewed.

Incompleteness may refer to material or immaterial aspects which often interweave or interact. Incompleteness in the process may refer to gaps attributable to single phases (planning, design, execution and management) or operators (clients, designers, contractors and users) or—in the more serious cases—the entire process, when due account has not been taken of the continuity of the long term vision, of the integration of the cultural, social, economic and environmental spheres or of the interactions between experts and end-users. The incompleteness of the product is found in the physical state of the buildings which were once intact but are no longer (such as the *thermae* building covering more than 500 sqm, probably connected to a luxury residence of the first century A. C. recently excavated at Tor Vergata by the University) or buildings never completed (such as the buildings for the 2009 World Aquatics Championships, just a few yards from the example mentioned above). Material incompleteness is measured on various scales, in the building component and/or the urban and landscape context, the consequences of which may lead to three main types: the intrinsic vulnerability of buildings to natural and anthropic agents; impossible or limited utilisation, starting with accessibility; the difficulty in attributing coherent understandable meanings.

A second consideration concerns the extent of the incompleteness, which manifests itself in relation to the various circumstances in which it is found. A mainly recently built environment prevails in the outskirts, having typological, morphological and material characteristics disconnected from the specific location. Although this, archaeological remains are found in peripheral areas very often, especially in the Mediterranean areas (Germanà, 2013).

For these traces of the past ages, as for many other much less patchy settlement,, the state of incompleteness may reach various levels of which varying degrees are more or less identifiable: from the evident ruin to the less perceptible effect of the interruption of contextual connections and irreversible transformation of the production processes that originated them. In any case, incompleteness in the Architectural Heritage must be considered inevitable and not necessarily something negative but rather an acceptable identity condition to be dealt with each time by searching for a temporary unity of the knowledge, meanings, relative physical conditions, appropriate uses, participation of the users and of the community.

In the case of the ‘Sails’ of Tor Vergata designed by Calatrava, an example which for its dimensions and wishful thinking may be considered symbolic of the widespread plague of unfinished public works in Italy, any proposal of urban regeneration must include some form of completeness for this relic of contemporary times. Some theories provocatively attribute an aesthetic value to the unfinished buildings and infrastructures of recent decades, almost wishing ironically to put right the shameful legacy of our corruption and inefficiency (Arborea, 2017). In effect, the imposing metal structure of the closed Calatrava site may produce an aesthetic impact but the main effect of this type of unfinished project, in Tor Vergata as elsewhere, is another: a deep resentment for the enormity of the wasted natural, financial and human resources which overall make the acceptance of these abandoned works unsustainable.

4 WHAT KIND OF CITY WITH WHAT ENERGY

With the prospective of Rome’s candidature for the 2024 Olympic Games and Paralympics an opportunity has arisen in the city to provide an answer also for the housing emergency.

The foreseeable accommodation for the athletes, like those built for the event in 1960, could be allocated later to council housing. This would help to meet the demand for housing which, for intrinsic reasons due to the economic crisis, impoverishment of the middle class and pressure exerted by migratory flow, is becoming a pressing matter in the capital city.

In the aftermath of these profound transformations, which make it necessary to formulate new residential and urban models, the Olympics could have started a concrete experiment in: a) high energy efficiency of the housing and management models for living in them, in accordance with NZEB standards, constructing highly efficient buildings, raising awareness in the inhabitants regarding their consumption, with the aid of sophisticated monitoring systems but conceived to increase awareness of how to manage energy; b) innovation in dimensional standards and the use of spaces in the home, since current building standards are by now obsolete, evolution of the archetypes of home design developed in the past century in order to satisfy a housing demand that is different from what they were conceived for; c) new production and construction systems, with advanced prefabrication, meeting the needs of economy, certainty of completion dates and rapidity, correspondence to the quality levels of the designs; d) a cultural conscience for environments which are healthy and highly performing, for the most part using natural and renewable materials.

The answers should have come through the international Solar Decathlon international competition (Bellingeri, Tonelli, 2016), conceived by the US Department of Energy in 1999 which selects twenty universities from all over the world to compete every two years in the conception, construction and management of housing prototypes of the future, powered by solar energy. The prototypes are assembled together in the same competition field where a kind of smart village is created for the duration of the competition which, through a single information network, monitors the performance of the houses during the ten contests of the Decathlon. The best solutions would then be the housing models to be used in the entire Olympic Village in the area of Tor Vergata and near the “Sails” site thus providing urban regeneration of an area that is extremely incomplete.

The structure was conceived for accommodating about 18,000 people during the games and then for conversion into housing for 7,000 with a part being destined for residences to complete the campus project of the Tor Vergata University and another part to extend the buildings of the University Teaching Hospital for the relatives of hospitalised patients.

In line with the recent European trend which encourages the saving of ground and recovery of empty urban spaces, the proposals should have identified in the urban regeneration of these rundown areas of the capital the way forward for the coexistence of archaeological remains and unauthorised building, with the construction of multi-story buildings in the spaces present to complete the already consolidated developments.

5 THE CHARACTERISTICS OF THE AREA AND ITS URBAN INTERPRETATION

The expression “urban regeneration” immediately raises questions of definition, not only in the overall sense but also in reference to the meaning of its component terms, namely “regeneration” and “urban”. Without getting into the now widespread technical and scientific discussion on the topic here, it is however useful to give account for the approach to the subject used in the workshop considered in these notes.

First of all the idea of tackling any kind of regenerative project in the chosen area (Tor Vergata) was not considered possible, especially but not only if giving it a “green” connotation, unless by placing it in a temporal dimension including not only its cultural history but also its natural history which should be handled in an integrated way and not separately and in a markedly cross-scale spatial dimension and therefore completely conforming to the above “inclusive” temporal dimension.

The evolutionary process of the Tor Vergata area, in accordance with the approach adopted, is thus attributable “at its origin” (Faccenna et al., 1995) to the initial phase (about 600,000 years ago) of the activity of two volcanic districts in the area of Rome, the Monti

Sabatini to the northwest and the Alban Hills to the southeast, the products of which extend progressively across the pre-existing plain, altering the morphology considerably and causing variations in the paleo-river bed of the Tiber. It is precisely to the hydrogeological unit of the Alban Hills (Cafiero, 2003) that the area under study belongs. From the biotic viewpoint to that unit corresponds the vegetation series of *Carpino orientalis-Querceto cerridis sigmetum* of the plains and pyroclastic slopes, as can be seen in the map of the vegetation series of the new 2008 Local Plan of Rome.

The structure of the environmental system of the Rome area overall is completed after the last glacial period (Wurm, about 18,000 years ago), when the watercourse of the Tiber before deepens and is then filled with alluvium in the following interglacial period (Faccenna et al., 1995). It is with this abiotic and biotic environmental structure that historically human interaction commenced in the area of Rome. Although this concerns mainly the alluvial deposits at the core of the city, in practice it also concerns all the rest of the system including the hydrogeological unit and vegetation to which the area under study belongs, an area which in fact still conserves a heritage which is often of inestimable value (see par. 3). But this heritage certainly does not represent the only sign that the historic evolution, especially recent, has left on the environmental sub-system of the Tor Vergata area. Or to put it in a better way, the historic and environmental sub-system of the area under study overall (Calzolari, 1999¹) certainly does not now manifest only the features to which we are inclined to attribute value (because, take note, it is always a question of our attribution of values though it may be widely supported and justifiable). Faced with the by now “typical” (at Rome and elsewhere) forms of urban sprawl recently involving also this area the abovementioned new Local Plan of Rome, the D2 “Structures of the Plan and metropolitan strategies” map in particular, formulates an approach based substantially on: i) metropolitan outlook; ii) decentralisation and polycentrism; iii) protection of the environment and heritage; iv) more services and urban functions in the peripheries; v) privileging the railway network for mobility (the so called “iron therapy”).

Tor Vergata represents one of the centralities at the metropolitan level on which the polycentric strategy is hinged. It also is the site chosen by the 2024 Rome Olympics Committee for the Olympic Village (see par. 4), in contrast however with the residential dimensioning of the Plan and with the orientation of the Marino Administration (prior to the current administration and to the subsequent compulsory one) which places it, together with a river park and without residential “legacies” (but directional instead), in an area gravitating around the northern section of the Tiber within the Grande Raccordo Anulare (orbital motorway encircling Rome). The new and current Administration of Rome, on the other hand having declared itself contrary also to the approach of the 2008 Plan, definitively resolved the question, to put it one way, with an announcement on 21 September 2016 by the Mayor Raggi to the effect that the candidature of Rome for the 2024 Olympics would be withdrawn.

The activities of the workshop, with the conceptual preconditions explained in the preceding paragraphs and with the methods and visions described further below, has been done constantly in a state of complete and free immersion in the complex situation described so far, dating back from our time to 600,000 years ago (at least) and extending spatially throughout the historic and environmental system of Rome and its environs well beyond the limits of the study area but also the boundaries of the municipal territory. Acknowledging that it is more convenient today to define the term “urban”, going beyond any traditional definition and residual city/countryside dualism, as a kind of physical and mental reference system consisting of material and immaterial networks as well as technical objects, manipulation of which implies introducing a stock of images and information circulating in loops regarding the relationships our society has with space, time and men, and that urbanity basically consists of a dynamic of mutual adjustment between a form of urban fabric and a form of conviviality (Choay, 1994).

1. See also Calzolari M.V. (ed), Roma: Permanenza e fragilità del sistema storico ambientale (<https://goo.gl/q54zH099>).

6 URBAN ANALYSIS WITHIN THE LOGIC OF PLAN

The didactic method used in the workshop is generally based on the prior planning experience for social innovation with the support of ICT (Marsh et al., 2013; Concilio & Rizzo, 2016; Eskelinen et al., 2014), on an analysis of the socio-economical context in terms of urban value (De Bonis & Trapani, 2016). In particular the analysis took account of the multi-disciplinary studies on the relationship between the centre and outskirts (Di Benedetto et al., 2017) and urban regeneration in the historic evolution over a long period (Prescia & Trapani, 2016). The key used to exploit the legacy of cultural, infrastructural and environmental resources in the ambit of sustainable tourism was the theoretical-design model of integrated interactive tourism (Trapani & Ruggieri, 2010). Lastly, consideration was given to the aspects of possible resistance to the collapse of this great urban sub-system also considering the aspects of urban resilience (Minozzi & Trapani, 2016). The urban context was studied very carefully with special attention being given to recent planning and planning forecasts as well as public debates at the municipal and local levels concerning the decisions of the administration and the advocates of Tor Vergata as a sports hub. The work group explored in particular the possibility of distinguishing the various components in the features of the urban and semi-rural landscape as follows:

- a. Points/hubs: Centres/large attractors (University, Hospital, Shopping area, unfinished sports area); these points represent the hubs and metropolitan turbines of the research and study immersed in the semi-urban landscape of Tor Vergata
- b. Residential zones: planned housing/redeveloped areas of urban disorganisation; the project provides for reuse of the houses built in accordance with the above technical norms and mainly those built without a plan (later redeveloped) which require maintenance, urbanisation, energy consumption improvements and revision of consumption cycles (water and refuse).
- c. Rural zones: Large abandoned or underused rural areas and large trees in private gardens
- d. Lines/corridors: urban and territorial mobility infrastructures (motorways, roads, pedestrian paths)
- e. Lines/corridors: Waterways which have undergone soil bioengineering works for connection of the grid of urban vegetable gardens in the area of Calatrava's 'Sails' project. In the final vision the residents who practise zero consumption living styles constitute an urban laboratory, the integrated model of which (centrality/mobility/accessibility/"green" policies and sustainable planning and design regarding water resources) is adaptable to all the outskirts of the great cities of the world with the due precautions being taken.

7 FOUR VISIONS FOR THE URBAN REGENERATION

Four planning opportunities in differing scales, methods and instruments can redefine the Tor Vergata area, assigning it a role and influence in the urban panorama of Rome.

The first consists of a possible relationship between architecture and infrastructures. The developed area, which is heterogeneous in morphology, fabric and quality, is in fact all within the existing city and features alternating open and built-up areas deeply imprinted by the Rome—Naples railway line. Redesigning the infrastructures to interact in various ways with the surrounds—underneath, above or beside—would transform the outskirts to produce a city with a futuristic appearance as seen from the motorway when passing through.

The motorway also passes Calatrava's "Sails" project which is an urban landmark of great strength and visibility and the new gateway into the city for those arriving from the south. As something to complete, rethink or leave as an unfinished ruin, the "Sails" project represents an opportunity and a challenge. It could represent a changeover from a traditional single-centred development model to a network system where community facilities—the "Sails" project, the teaching hospital, universities—would become new hubs.

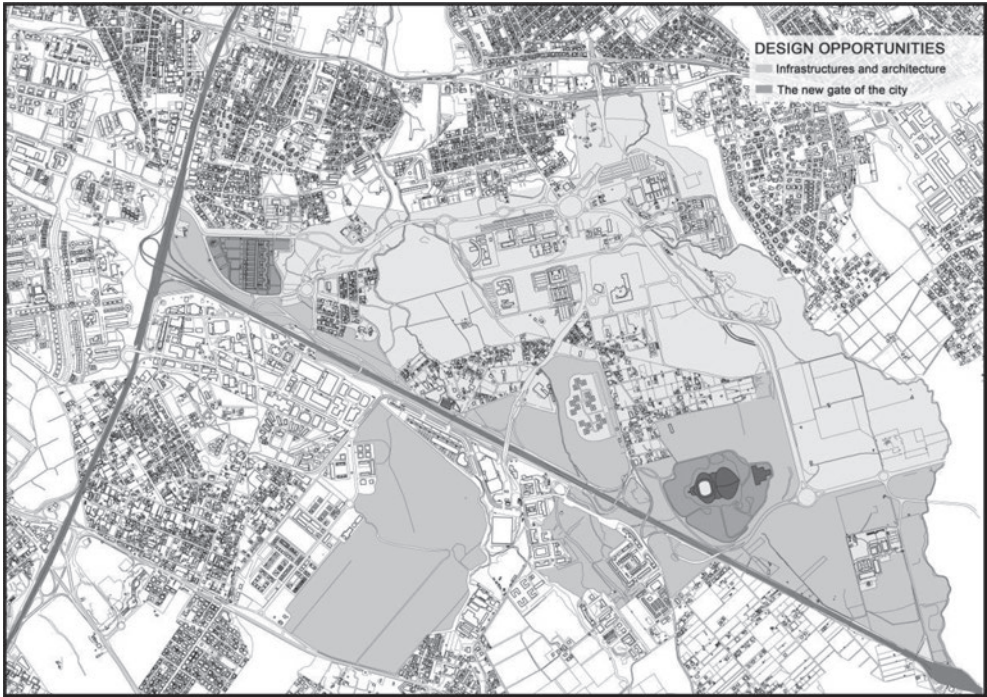


Figure 1. The areas of the possible: the new infrastructure and architecture relation; the new Town Gateway localization.

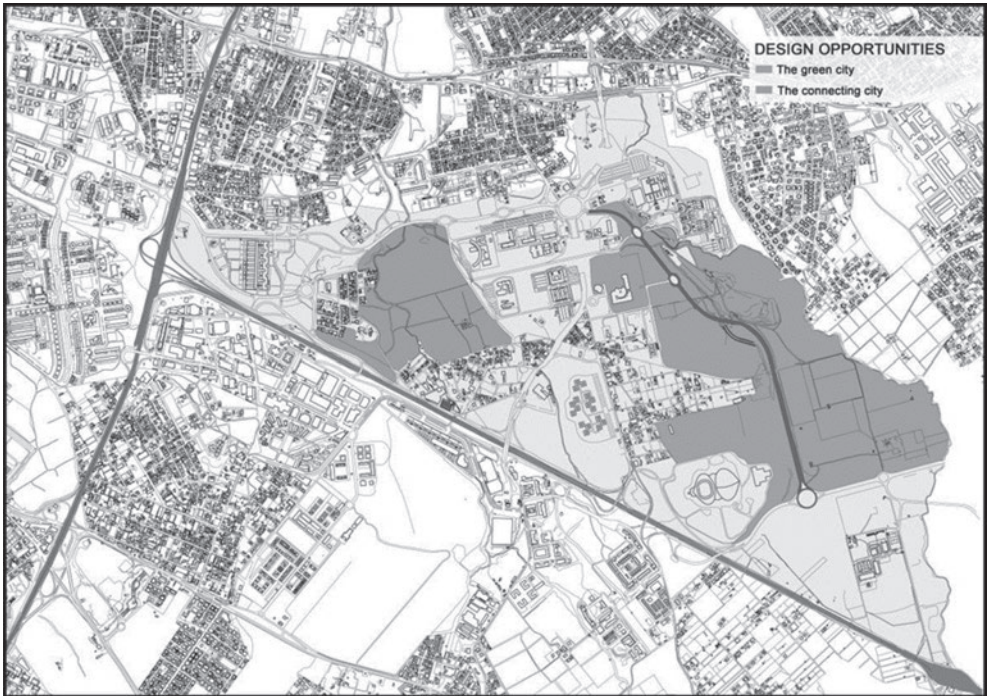


Figure 2. The green & connecting new city fields.

The third opportunity consists of the possibility of transforming Tor Vergata into a green city. The free areas destined by the General Urban Development Plan to be used as a botanical garden, equipped green area and agricultural concerns could become a single large integrated and homogeneous setting, a park with urban traits and attractiveness, capable of forming relationships connecting the main features of the area—the sports facilities, university buildings, residences—and of giving shape to a complex multipurpose part of the city.

Lastly, in contrast we have the connecting city: the rejoining of the pre-existing developments by planning the still free areas which wind through the developed areas assumes a style based on the differences, lack of homogeneity, alternation of full and empty, the denser areas and sudden rarefactions. A new urban design could reinvigorate what already exists, rescuing the area from its present situation of anonymity, fragmentation and randomness.

These are the four different planning opportunities, four approaches which provide some possible answers regarding what could be the future of the outskirts redeemed from a state of isolation and anonymity.

8 CONCLUSIONS

The short duration of the Workshop in which the urban regeneration plan for Tor Vergata was developed did not allow the first concrete step to attribute completeness to Calatrava's "Sails" project to be taken, at least from a viewpoint which is first conceptual and then physical. This is a step that only the Municipal Administration can take, perhaps with procedures involving all the stakeholders and the community, concentrating on examining the originally intended use and consequent determination of an alternative use. The general planning option developed and briefly outlined here consists of systematising the whole—currently uncoordinated—of what already exists in Tor Vergata's area: the points/hubs (current and potential centres), the zones (residential and rural) and the lines/corridors (road infrastructures, waterways and ecological itineraries).

Most of the effort went into determining the connective relationships among already existing developments, which are not only physical or visual but also regard meaning. An example of this is the connection, which has lasted for two thousand years, between the *thermae* building that came to light in the archaeological excavations and the Calatrava's swimming pool, rethought in accordance with the principles of Environmental Design and integrated with developments connected with health and beauty. The urban regeneration of Tor Vergata then can be interpreted as an exercise in attributing completeness of meanings and of uses which are not measured in terms of filling space or land but in the fullness of the cyclical nature of the processes, which is a precondition for every sustainable transformation in the built environment.

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