PART 2:
Rethinking the Roman Landscape

SECTION 1: URBAN AND PERI-URBAN LANDSCAPES

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Chapter U1: Centrality and orientation in the city of the third millennium

THE FOLLOWING SUMMARY OF FRANCO ZAGARI'S KEYNOTE LECTURE FOR LE:NOTRE LANDSCAPE FORUM PARTICIPANTS IN ROME IS BASED ON HIS THESES STATEMENTS AND NOTES TAKEN DURING HIS PRESENTATION AND WRITTEN DOWN BY GABRIELA MAKSYMIUK.

In the new city, the qualities of centrality and the principles of orientation change at high speed. As a consequence, the landscape design reveals mostly topical. However, as we were reminded by Franco Zagari, it necessarily demands new tools, methods and strategies linking tradition and innovation, which involve various knowledge and a strong social participation. Zagari confirms that the landscape is perceived not only as a static sequence of elements in the space, but also as a lively and interactive process. He points out that awareness and experience can contribute to redevelopment a participation that is at the root of a democratic government of the territory.

Franco Zagari started his speech with a reference to his direct experiences from Versailles. Using this example as a personal tribute to André Le Notre he said: “To me, Versailles had always been a reference, given its planning concept with a remarkable scale jump in relation to Paris, which brought the Louvre to the countryside, serving as a design that physically represented the dimension of the new country. The outdoor spaces were – I guess – the widest of the world to host the first-ever court of more than 40,000 people. I learnt this from Giedion, who also taught me that the garden through the time is a workshop of shapes and ideas afterwards developed in models for urban growth. Such were the cases of the square and crescent for the English town, the Allées de Chasse, which anticipated the French boulevard, and the ring in Wien”.

Zagari states that André was a great courtier, but his modern resolution never left any detail to chance. He was born into a gardeners’ family. In Versailles, he shaped a complex programme of ludic and political activities, currently darkened by the hackneyed touristic use. The fine and wide iconography overwhelms us by showing an unprecedented yard with regards to its pre-industrial quality and extension, with its huge systems such as Marly’s waterworks, and magnificent performances and feasts with fireworks, parades. According to Zagari, André Le Notre was a fine urban planner, too. He compares Le Notre with Paxton, Olmstead, Burle-Marx, and even though at a smaller scale, Italian Raffaele De Vico.

For a theorem of sustainability Searching for the theorem of sustainability, Franco Zagari wonders why not saying “The role of urban landscape in the transformation of open spaces”? He points out that there is a big discriminant between the one who speaks of landscape with merely objective terms, usually claiming to defend it, often without understanding neither its evaluative reasons nor its need of transforming, and the one who refers to it as an approach, a method, a discipline. According to Zagari the project is the casus belli, and through this filter he would raise some issues on the landscape, its crisis, the ongoing trends, and also on some positive untrendy reactions yet more often highlighted. He explains the approach: “From the flower’s corolla up to the wider scales, the design faces rising amnesias, omissions, misunderstandings – often not guiltless – which make difficult sharing among communities, networks, people, and the very meaning of policies of preservation, care, and innovation”.

The Forum’s theme According to Zagari, the Forum’s focus on extra-urban spaces has been eventually posed in a new way. He refers to Lawrence Halprin’s design of squares in Portland. He claims that it has been fifty years since Lawrence Halprin introduced two strong provocations. Zagari suggests that this specific project had marked the debate on public spaces ever since.

Zagari reflects that it’s amazing how much innovative and open the theme of urban growth is, because the new millennium city entirely differs from its precedents. A totally different city Zagari states that the todays cities and “our habitats” are totally different from those where we were born in. He mentions that in numerous parts of city one cannot define neither urban nor rural or natural. Zagari calls this phenomena a “city – non – city” – a totally different city, which extends itself with an unknown speed so far. Again, in his speech Zagari emphasized the need for new tools and methods, different knowledge regarding ethic and aesthetic evaluations, new awareness of natural and cultural interactions, a new mind and approach. Zagari explains: “I think I have learnt many things these days, but huge taxonomical apparatus often seem to pursue the course of events. The matter is – I believe – to foresee, anticipate it; is it not true that the culture of garden already did it regarding the landscape, by providing prototypes, ideas, behaviours, on which the cities further developed?”
The first aim: massima universalia
The keywords are open process, participation of knowledge and opinion, clear task, beauty, responsibility. Franco Zagari strongly believes that there is a claim of courage, and nowadays putting beauty plainly as a political aim with the greatest ambition and full responsibility has a deep meaning, re-stating with Dostojevsky that "beauty will save the world".

The second aim: minima moralia
The keywords are relationships and systems, activities and streams, guerrilla, homeopathy, microsurgery, acupuncture, surfing.
According to Zagari, the second aim highlights that every project, in order to regenerate the landscape, should firstly accept it, including its contradictions, even if it is less comprehensible. As it may be done for a suffering body to be treated with a friendly spirit, patiently, with a bit of humour and the best possible expertise, piece by piece, whether it deals with famous contexts or huge parts of the territory that are dull or neglected. Therefore, it is necessary to understand the vocations of the place, as to agree on the main lines of intervention, but in parallel to discover the extraordinary strength of small numbers, everything which is close to our daily scene, in close contact with the people.
Zagari points out that Cure vs. Crisis is a twofold theme, being dialectic and not necessarily antithetic. He reminds us Marcel Duchamp who stated that “Modernity is what transform crisis into value”. Nowadays, setting the theme of landscape care would imply not to opt for an attitude of removal, but friendly towards a suffering reality. Zagari relates also to the “1993 Almanac of the Italian society” by Laura Balbo. He states that many of us believe that elements of strength can be taken from the depression of the crisis. Such energy might change it into an asset, trying to disassemble and reassemble vices, habits, rules that stalemated the design, with an attitude that is not only negative, but also creative.

The third aim: reset
According to Zagari the keywords are the art.9 of the Constitution, and the European Landscape Convention. At this point Zagari reflects that the realization of urban plans and public works represents one of the most demanding challenge: a real and radical reset is needed. He underlines that as there are not only crucial, but also cultural and socio-economic reasons, this aspect must be considered the top priority in the interest of European countries. According to Zagari, the landscape designer can contribute decisively, because his/her mission is purposely arranged to integrate his/her specific knowledge with other fields and creative approaches and, above all, to ease the dialogue with anyone who is aware of and involved in a certain landscape.

Projects
In his keynote presentation, Franco Zagari presented several his designs. He’s chosen a random order of presentation, neither following a chronological order nor a geographical one, as such is the way that the present through moves, through short-circuits and elliptical orbits, like on the web. Figures 3.1 to 3.4. represent a selection of his projects.
Zagari refered to Rashomon, the everlasting film by Akira Kurosawa, and to Pirandello’s drama such as Six Characters in Search of an Author, as he believes that it is not so much interesting to find out a reliable truth, as to examine several interpretations of the same theme. Therefore, the truth should not be searched among many, but in the combinatorial analysis of reciprocal connections. The lifecycle of a work can be short or long, sparse or dense, and a fascinating mystery often flows between construction and demolition.
Fig. 3.4. Roma – „Cythera“ and „Hashi“.

Fig. 3.3. Porto Sant’elpidio (2002).
Chapter U2:
The EUR district: expansion developing into a centre

1 This chapter presents a perspective of a local expert - Emma Tagliacollo.

U2.1 Background
The EUR that we know today is part of Rome, planned and developed as the first really modern area in the various phases of its creation. Its current form is the result of successive steps that began with the ideation of E.42, transforming it from a monumental centre into an urban centre and district, that is, transforming an ideal place into a part of the city. EUR can be defined as a modern district due to several planning choices that characterise it. Amongst examples one should mention are: viale Europa – a wide urban carriageway with a system of views defined by residences and services, the design of the green spaces planned at the same time as the area plan, the architectural masterpieces of the 1950s and 1960s that modified certain parts of EUR and its initial image. One of these masterpieces of 1950s and 1960s is the Propylaea of EUR designed by Luigi Moretti. The Propylaea changes and anticipates the entrance of those coming from the city and characterises it with modern elements of the International Style of the 1950s, bringing a new monumentality to the fore.

Another example are the towers of the former Department of Finance, architecture of the new modern city that together with the Department of the Post identifies the city gate of EUR for those who enter from the south along via Cristoforo Colombo.

The 1960 Olympic Games brought crowds to this part of Rome – equipped with buildings for the Olympic Games (sports hall Palazzo dello Sport, Velodrome, swimming pool Piscina delle rose) – while at the same time strengthening the connections between this area and the city. Consequently, EUR became a district of Rome and as such is a built-up area, not only populated by the people who already lived there but also by those who visited the area due to the strong impact of the Olympic Games media coverage. EUR also became an area of experimentation for post-war architecture thanks to the housing whose art and architecture has been provided by its young planners and artists. These new residences, built on land purchased by various co-operatives, complete the design of EUR, bringing the financial income required to maintain public services in the district in addition to the reconstruction and building work.

U2.2 EUR as a new city
EUR is directly positioned on the line of city expansion from the centre of Rome to the south. The centre of Rome is composed of the heart of the historic city, that is, the Forums and the entire district historically denoted as an area steeped in history. The Forums are not only particularly important because they illustrate the history of Rome directly but also because they are part of a programme of expansion and perception desired by Mussolini during the twenty years of Fascism, and under the new administration of Mayor Marino now present the vocation of an archaeological park.

Planned expansion to the south started with the choice of developing E.42 (Universal Exhibition) in this particular

Fig. 3.5. a) Topography suggests the lines of the project E.42; b) Plan, 1937. The architecture lies on the territory so as to create a composition in which the vegetation is a unifying element.
area of the city that is now perceived as being very built-up and dense in terms of both housing and services but which was open countryside in the 1930s prior to this programme of expansion.

The pre-existing geomorphological situation and relief of the land on which E.42 was built provided the planners with several significant points where buildings could be built and several of the strong points and symbols of E.42 could be positioned and still recognisably persist in EUR. Among these are the moat of Ponte Buttero along which the lake in EUR has been positioned, the church of St. Peter and St. Paul on top of Monte del Finocchio, and the Palazzo della Civiltà italiana on Monte della Creta.

The 1937 plan followed the initial idea of the architectural design adhering to the relief of the land. The project seemed to be laid out on the land by corresponding to the contour lines so as to create a dynamic composition in which the green areas are a driving force in the project and at the same time are an element unifying all of the components in the plan.

The project restores EUR in the image of a garden city. Its “naturalness” is seen in the dilution of what would then become E.42/EUR as desired by Piacentini – director of the great exhibition that was to be held by Mussolini’s fascist regime – using a rigid cardo decumanus system. The layout of the 1937 proposal also fits into the land so that the green areas function as unifying elements that provide variety to the composition of the plan.

Elements forming the green areas are: the parks, the system of green roads (of different sizes and scales), and the lake that all form the framework of the E.42 system, connecting housing and monumentality (clearly seen in the area dedicated to the Housing Exhibition).

The initial 1937 plan for the 1942 exhibition was based on consolidated schemes for the Roman city. The project is celebratory and the buildings have a landscape character, the architecture is framed by telescopic views, e.g. the orthogonal street systems and a repeating system of towers that reinforces the theme of landscaping and breathe life into a framework of views laid out so that they are always different.

The last plan dates from 1939. E.42 is composed of a series of nuclei composed of the squares, the monumental buildings, the Housing Exhibition, the artificial lake, and the large park. The main system around which both planes are concentrated is the north-south axis of via Imperiale (planned as an axis equipped with facilities). The roadways unwind from here to the various nuclei following an internal hierarchy organising the space that can be identified in other themes such as the road network, the piazzas, and the green spaces. However, the purpose of the new plan is to rationalise the facilities, creating axes with views perpendicular to via Imperiale and a system of piazzas of increased proportions up to the monumentality of piazza Imperiale. In the initial plan the lake was like a natural basin, and is now regularised, reminiscent of how the pecile of Villa Adriana looks.
E.42 was left to itself after the Second World War and records show that it was abandoned. It is only thanks to the initiative of Virgilio Testa, Commissioner of the EUR Development Agency, that the area was considered again and revitalised, including the building of houses for the middle-classes who buy houses in this part of Rome. Consequently, creation of a middle-class area similar to others in Rome (such as Parioli) was activated but with the hope of a better quality of life.

Furthermore, the underground railway line between Rome and EUR and the road named via Cristoforo Colombo (ex via dell’Impero) have been completed. Consequently, the process creating the district of EUR was set in motion and is still in action. Marcello Piacentini, who had managed the work in the pre-war period, also took part in the reconstruction and organisation of EUR (no longer called E.42).

The new structure and layout proposed EUR as an executive and exhibition centre where government departments, public companies, and international companies (such as financial institutions), specialised schools, and space for exhibitions and shows could be collected together.

Many buildings left unfinished because of the war were completed during these years (1954-1963) and new projects were also developed. EUR was involved in the project for the 1960 Olympic Games that gave the area new strength and renewed interest in it, providing the administration with the opportunity to expand Rome to the south.

EUR has been developed from a monumental centre into an urban district thanks to the building of new housing, the partial completion of the area with the construction of the buildings in the original plan for E.42 and by the construction of new buildings.

The green spaces provided by the parks are planned and proposed as an element unifying the whole project because they place the public spaces in relationship with the private ones.

The architecture moves away from metaphysical, something that is also portrayed in the film The Eclipse directed by Michelangelo Antonioni (1961). This film advances the idea of a district that is no longer metaphysical, but one where, in contrast to the paintings of De Chirico, man is present and lives. As a result, the relationship man has with himself also seems to change. The landscape of EUR is ever present in the film and jars in some way with the rest of the city, with the crowded historic centre full of people, cars, business deals to be made, so different from EUR with so few people, its stray dogs, vagrants (in search of an identity), intellectuals (like Victoria and Richard who work as translators and who perhaps have a new way of living the culture, and also as recounted in the novel by Bianciardi La vita.
U2.3 Building experimentation and the relationship between built and open space

The Olympic Games and the opportunity of making it part of a media event also materialised thanks to the presence of via Olimpica, connected to the Foro italico, so that development occurred towards the west in the opposite direction to the urban development plan of the time but in line with the 1942 plan that was never activated which provided for an axis of expansion towards the sea.

The planning experiment is important in that several examples of how buildings could be planned, above all their relationship with the garden and the surrounding space, can be seen in several examples.

The relationship with the outside of the house built for the family Simen Brizzi by Del Debbio is provided by the opening towards the landscape that was framed according to views defined by the architect. The internal garden was to have a Roman bath (impluvium) with the Roman domus as a reference model. Therefore, here nature is governed by the planner.

Pasolini such as Accattone and Mamma Roma never go to the opening towards the landscape that was framed according to views defined by the architect. The internal garden was to have a Roman bath (impluvium) with the Roman domus as a reference model. Therefore, here nature is governed by the planner.

Raffaele De Vico was one of the first Italian landscape architects and studied several of the main solutions for the vegetation in the EUR district. Green space becomes an element in the plan, the framework of the whole composition.

His studies for via Imperiale show vegetal elements that become building material such as a theatre constructed using the vegetation that follows the contour lines used as seating. The sculptures and buildings function as wings which reinforces the views.

The green areas create spaces with views without using architecture constructed in the traditional way since it is the green areas that construct the space and rationality of the framework, uniting the design of the wood that seems to thin out in order to become part of the system of walkways between the piazzas that connect them together.

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De Vico uses Ars topiaria to give form to the hedges in the view of the staircase towards the church. Consequently, in addition to the views down the main avenue, another two narrower lateral avenues have been created where a more intimate size can be found that mediates the monumentality of the buildings restoring a human scale. The studies for via Imperiale (now via Cristoforo Colombo) emphasise the double dimension of the street. On the one hand the identity of the street is marked by a long straight stretch and on the other it is composed of avenues and service roads connected by gently sloping staircases. The avenues and service roads are planned with composed spaces where there are also seats and fountains, cosy places to relax as if in a lounge. Domestic pines frame the road axis and harmonise with the buildings.

Unfortunately, a great many of the indications of De Vico have not been respected so that several parts of the EUR district are not so usable and the image of the city obtained from the same urban space is prevalently made of stone.

**U2.4 The initial completion**

The initial completion came after the end of the Second World War and in the early 1960s. EUR became a directional centre and residential area which was also due to the work carried out for the 1960 Olympic Games, an important event for the whole of Rome.

Being under the microscope in an international competition released the place from its past as a district created during the Fascist regime, allowing it to become part of the modern city.

Several buildings contributed to the transformation and passage of E.42 into EUR. The most important are: the *Palazzo degli uffici*, the Post Office, the *Palazzo della Democrazia Cristiana*, the Olympic Velodrome, the Department of Finance, and the Propylaea (Exxon Building). Each one of these buildings contributed to the modernisation of this area and of Rome because of their various qualities, a different interpretation of the space, and the contribution it makes to the landscape.

The *Palazzo degli uffici*, designed by Gaetano Minnucci, (1937-1939), symbolises E.42 and EUR because it is here that the planners for the new district are based and because the management and representatives of E.42 were based in it too. It is the first thing that people see as they enter the district from the underground railway. The building designed by Minnucci is distinguished by a system of two courtyards created because of the footprint of the building itself: an apparently closed complex that creates two open spaces (a courtyard and a piazza) with urban validity.

The part of the complex with a square footprint has a double portico with pillars on the side facing viale *Civiltà del Lavoro*. On passing to the inside through this diaphragm, designed with light and shade in mind, there is a fountain the sound of whose running water neutralises the external noise permitting the well-lit space to be sensed, a space created by the combination of elements it is composed of: the light, the water, the shade, and the construction materials. This courtyard functions as a semi-public and semi-private space and is a garden built of minerals (stone and travertine).

The part of the building with a rectangular footprint has an open courtyard thanks to its view over Piazza Konrad Adenauer. This is a large public garden that is in equilibrium with the design of the green spaces next to the building.
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The compositional elements are: the light, the water in the fountains, the mosaics, the statues, and the domestic pines as monumental elements combined with the presence of the building itself.

The Department of Finance was designed by Cesare Ligini, Vittorio Cafiero, Guido Marinucci, and Roberto Venturi, (1958-1962) to reinforce the function and image of EUR as an administrative centre in Rome. The building can be viewed as an interpretation of the International Style in the modern day Roman context. The urban structure of the Department breaks with the overall EUR area design. In fact, it is based on an open schema of blocks that contrasts with the shapes designed by Piacentini (based on the more rigid cardo decumanus grid). The views are designed by mixing small repeating elements such as the windows. The area of the complex is particularly interesting because it is situated opposite the Nuvola project (New Conference Centre) designed by the architect Massimiliano Fuksas. The New Conference Centre project will occupy the last free plot in the district and is part of the recent completion of the expansion.

The Propylaea (Exxon Building) designed by Luigi Moretti, Vittorio Ballio Morpurgo, Giovanni Quadarella, and Giorgio Santoro, (1961-1966), can be read as a new entrance from the city of Rome into EUR. Furthermore, they define a kind of modern city wall surrounding the hexagonal footprint of EUR reminiscent of the Aurelian Walls (the wall surrounding the historic city of Rome). The Propylaea are composed of two symmetrical buildings situated on the sides of via Cristoforo Colombo and present an open and free ground floor thanks to the pilotis. The views are formed by metallic “brises-soleil” behind which there is the glass façade. The top floor overhangs and is introduced by a continuous glass fascia so that it assumes the role of a penthouse. Moretti interprets the role of the Propylaea in his design as the entrance and a visible cone. The columns in an initial design for the ground floor later become pillars, there are modern tree trunks introducing a herbaceous floor that is only a few feet away. Consequently, both a continuous physical and perceptual relationship between building and landscape is defined.

Fig. 3.12. The area before the construction of the Velodrome

Fig. 3.13. The Velodrome
The Olympic Velodrome by Cesare Ligini, Dagoberto Ortensi, Silvano Ricci, Clemens Schürman, and Herbert Schürman, (1957–1960), no longer exists after being demolished in 2007 following political and economic problems. In addition to being a work of land art, the project deserves to be remembered for its beauty and unicity as an uncovered velodrome (Fig 3.11 and Fig 3.12). It was the result of a national competition in 1955 and one of the architectures planned for the Olympic Games of 1960 that contributed to the modernity of Rome and to revitalising EUR.

Consideration of the Velodrome and the area around it reveals the importance of the place on which this architecture rose. This reading was taken by superimposing maps from the various times of construction and reconstruction, from aerial photographs, and on-site urban analysis measuring the spaces in the city. In fact, the aerial view of the urban structure shows a “basin building” comparable with the connecting green areas in this district. Its dimensions are proportional on a human scale and can be compared with the nearby housing. It is a different type of place from the monumental heart that can be seen in the background of photographs taken in different type of place from the monumental heart that can be seen in the background of photographs taken in the past.

The area is certainly strategic. In fact, the buildings in EUR on viale Oceano Pacifico contained within the pentagon play a role connecting the surroundings in which they stand and a second separate role providing a connection to the city of Rome. The importance of the area is confirmed in the competition for the Ponte dei Congressi bridge (won by Enzo Siviero), still in the planning stage at the time of writing, that lies within the orbit of a hardly homogeneous part of the city, with unresolved planning questions such as the Ponte della Magliana bridge (as the only place connecting EUR and Magliana), and with areas of through traffic crossing them and connecting with the hinterland of the city such as the Orte-Rome-Fiumicino rail node.

Interest in the area arises from the fact that this area plays a modifying role which is also planned in the Urban Development Plan approved in recent years. In fact, the urban planning and zoning instrument developing the Ponte dei Congressi bridge takes the opportunity to redevelop the connection between Magliana and EUR and the connection with the River Tiber (also a follow-up to the road infrastructure of viale dell'Oceano Pacifico). Furthermore, the new metropolitan centrality of EUR Castellaccio has developed near this area, where europarco is being defined by towers for offices, two skyscrapers, the Department of Health, various housing projects, a shopping mall, all united by a system of vegetal connections.

With all of its planning typologies, Castellaccio starts trimming the edges of EUR already begun by the development of the districts resulting from law 167. It integrates and contaminates the historic area and requires relief routes affecting via Cristoforo Colombo in favour of alternative mobility.

The Velodrome was a unique development not only for its open-air track and its architectural and technological unicity but also for the way in which it occupied the territory. Perhaps this architecture represented the essence of EUR: the construction of a landscape by modifying it (a general planning rule in EUR). In fact, the Velodrome was a building-not-building because it was built of earth and cement to which many other materials, including industrial materials, were then added to create its formal nobility.

The fact of it being composed of earth is a reminder of how the landscape looked before its construction. Photographs of the time show soft hills with the symbolic architecture of EUR in the background. The shape of the Velodrome seems to recompose these hills, the soft landscape consequently becoming architecture. And yet, there is another exceptionality precisely in defining it as building-not-building and a work of land art. It does not belong to the territory only but also transforms it by applying a creative formula.

The complexity of this building was not only seen immediately after the end of the Olympic Games because it does not conform to the regulations – which the International Cycling Union had still not defined in the 1950s – but also because of the concrete problem of maintaining the variety of materials and the fact that it was an open-air velodrome.

With the passing of the years it seemed to become a forgotten architecture and it was only in 2006 that it was discussed again after finding the archive of architect Cesare Ligini and the Soprintendenza architettonica di Roma (City of Rome Superintendent of Architectural Heritage and Landscape) insisting on starting a protective restriction declaration and on legally stating the cultural heritage value of this building. Even though its quality was excellent and it was an example to the world, the Velodrome seemed to have problems being recognised as a work of quality. The value of this work does not have benefits other than sensitising students, employees, and the citizens who live in the areas, demonstrating the problem of communicating the value of heritage.

The state of neglect together with a series of financial problems arising out of the strategic importance of the area and its value in linking the communications network led to its demolition in 2008. Its demolition not only seems to indicate its non-recognition as a work but also a concept of heritage linked to monetisation of heritage or as in this case of its area of being of greater value if the land were freed for other use.

Ideas for this area have included new housing and the development of a sports centre (which would maintain the opaque image of the architecture).

Chapter U2
It is indisputable that what remains is an empty urban space missing something, in this case the Velodrome. In fact, the lack is the result of a completeness being taken away which leaves an unease but from which the strength of a new project can be created. The Velodrome area now has the potential to become a new agora. The empty space makes it possible for different meaning to combine to redefine this area, which can be viewed as a new agora, a territory connecting the citizen with different scales.

The theme of the unrecognised and demolished architectural heritage gives rise to defining an urban planning and zoning policy that takes the quality of the city and the needs of the citizen into consideration, combining this with the definition of new systems of relating neighbourhood, city, and territory. This point of view could be a form of compensation for the forgotten heritage.

**U2.5 Recent completion**

Today the green spaces internally unite the EUR district. The plan of De Vico is to have a tray of green space on which the internal connecting spaces of the avenues and paths inside the parks can be identified. The green spaces also unite with and place the symbolic elements of the monumentality into relationship.

Various interpretations of this planned and built nature are found inside the EUR district.

The Lake of EUR unites various spirits. It is a cultured testimony to ancient history but also a garden of games in the city with the buildings housing the government departments reflecting in it. Furthermore, at the same time it has a representative function as it gathers cardinal elements of the EUR project around it: the UniCredit building that used to be the Hotel du Lac, the towers of the former Department of Finance subject of a disregarded project, the ENI building, and the sports hall *Palazzo dello Sport*. It is here on the Lake of EUR that two projects have recently been developed, one for movement, a bridge called Hashi, and the other a stationary urban lounge called Cytera, both designed by the Franco Zagari architectural firm. [Fig. 3.14.]

Hashi was completed in the spring of 2007 and is a double curvature bridge for pedestrians connecting the two banks of the waterfall on the lake. The materials used are marine wood and glass. The boardwalk bridge joins with one of the most interesting places planned by Raffaele De Vico: the lake area. Hashi runs alongside the waterfall garden so it is next to the water games and enjoys a view of the sports hall *Palazzo dello Sport*. The insertion of the bridge also makes it possible to continue to walk along the lake, interrupted by an area prohibited to the public unless for special events.

The Cythera bridge-terrace borders the Lake of EUR (cutting its geometry). It is composed of a floating island-platform and by a nymphaeum. The platform is situated on the bank on the western side and is part of a pedestrian path in the park designed by Raffaele De Vico.

The structure is 60 metres long and has a varying width measuring 12 metres at its widest. The walkway on the bridge is made of marine wood slats. The continuity of the landing stage is interrupted by seven glass fibre floating tubs inside which are a variety of nymphs.
addition, there are areas along the path equipped with facilities to enjoy the open air.

These projects were made possible by the Joint Plan for the Use and Improvement of the Green Areas (Piano Unitario di Utilizzo e Valorizzazione delle Aree Verdi) according to the Agreement signed jointly by the city council of Rome and EUR S.p.A. on the 28 of July, 2004 that contemplated the re-establishment of green areas in EUR by 2010. The plan has operational planning unity and conserves the parks in the district. Furthermore, services for the inhabitants were provided including pedestrianisation of large areas and cycle lanes (Fig 3.15 and 3.16).

Included in the Lake of EUR redevelopment projects is a Mediterranean aquatic museum planned by Domenico Ricciardi involving an investment of 50 million Euro through project financing provided by several private backers: Expomed and RR Service who are also responsible for the executive plan (project description in Table 3.1)

TAB. 3.1. PROJECT DESCRIPTION FROM "IL MESSAGGERO" NEWSPAPER, MARCH 2005.

“It has become a must for promoting tourism in large European cities: Lisbon, Barcelona, London, Hamburg, all of them have their large aquarium. But Rome will do more. Following the example of Boston and Japan, it will build a latest generation virtual aquarium in the Lake of EUR in two years’ time. The City Council unanimously approved the project yesterday. It will be a virtual aquarium of 16,500 square metres with a lot of real plants and rocks but with fish projected onto the water so as not to keep them in captivity and not to change the natural environment. (…) There will be a mega glass cupola under the water with two tunnels that will make an internal walkway for the visitors. The marine animals will be projected among the real plants and rocks. It will be a museum of the Mediterranean Sea, a new structure to enhance the role of Rome as a city of the sea, and create about one hundred jobs for marine biologists and technicians.

The seabed of the promontory at Portofino will be reproduced inside the cupola as well as the Tuscan archipelago, the Maddalena Archipelago, the natural marine reserve on the Island of Ustica and that of Torre Guarcheto, the planned natural marine reserve on the Aeolian Islands, Conero park, and the Miramare marine park. Furthermore, several of the great basins will show a pair of fluvial environments (the River Tiber and a few lakes) with various species of virtual freshwater fish and typical vegetation as were present before the ecological disaster and as will be restored. On the other hand, another basin will be dedicated to underwater archaeology. (…) Along with the aquarium a new underground car park will be made under the square in front of the EUR Palasport railway station with more than 15,000 square metres of parking available for vehicles".
The completion of the work was scheduled for 2012 thanks to an agreement between the Bank of Intesa Sanpaolo, Unicredit, and Mare Nostrum Romae (“Il Tempo”, 12 February, 2011) that also in part provides for excavation of a bank of the Lake of EUR, changing the original design. It will be accessed by a tunnel made of transparent acrylic (with a moving walkway) from the underground railway stations of EUR Fermi and the Palasport leading directly to the bottom of the lake where the exhibition tubs will be positioned. The structure will probably be managed by the scientific committee of the Biopark foundation with the aim of creating the Second Tourist Pole in the Capital. The project is still being defined and the latest contents are not known.

**U2.6 The current shape**

If only the boundaries of the road network are considered, EUR is enclosed in a pentagon but its boundaries cannot be assumed to be the physical limits of EUR. The outline of the pentagon is easily recognised from the air. The sides are defined by **viale dell'Oceano Pacifico**, **via Egeo** – whose geometry is paralleled in **via Ostiense** side by side with **via del Mare**, then **viale di Val Fiorita**, **the Magliana viaduct**, **viale dell’Atletica**, **via Laurentina** which can be interpreted as the edges opposite the river, and **viale dell’Oceano Atlantico**. However, the edges are also defined by the relief and the contours of its slopes that fudge the classic shape and the usual view of a pentagon (that can only be identified from height). Superimposition of E.42 in the latest land use registry map on that now built shows how the edges have been eaten, corroded, almost blurred by the bordering neighbourhoods that have been inserted in the gaps in the boundary. These borders are characterised by varying in height above sea level. This can be seen from viewpoints in the hills that outline the profile of EUR such as the view at the top of the hill in **Parco degli Eucalipti**, by the side of the **Tre Fontane** Sports Centre, on the far side of **via Laurentina**, on the **Abbazia delle Tre Fontane**, or from the belvedere viewpoint in piazza Benito Juarez that was to overlook the Albani Hills in the plan of Raffaele De Vico, or the view towards the River Tiber from the rear of **piazzale della chiesa dei Santi Pietro e Paolo** (St. Peter and St. Paul square).

Furthermore, the view of EUR from the Sheraton hotel is interesting as it frames two visual targets of monumental EUR, the **Palazzo della Civiltà italiana** and the church of Saint Peter and Saint Paul (built on two hills) and also the new gate of EUR, the Propylaea that according to Remiddi & Moretti (2006) “offers an elegant image of modernity (…) creating a sort of opening to enter through the city wall”. Further project description are presented in Table 3.2.

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**TAB. 3.2. ANTONINO TERRANOVA’S RELATION - INTERVIEW WITH E. TAGLIACOLLO, 2011.**

«At least in its central part, EUR is a business centre but in a particularly peculiar way. First and foremost is the planning of its layout as a World Exhibition (an exhibition hall representing a political regime) giving a strongly unified character when other directional centres are above all the accumulation of individual representations of individual companies or institutions always competing against each other. Furthermore, precisely because of its discontinuous development, it has not been specifically configured as a business centre. The limited residential areas conceived as experimental showcase settlements have overflowed, transforming into important nuclei in an everyday city (even if distinguished), and then other parts of the residential city have surrounded it. So little by little Euro has lost its character as a completely monofunctional space. Its roads are no longer simple accesses to offices and institutions, only crowded in the rush hour, but arterial roads in the city with a normal urban life (at least in several sections)».

The most evident example of this can be seen in viale Europa which «is made so that it gathers a great many themes of what is modern: reinforced concrete, small blocks of flats with penthouses, moving some buildings back, and with car parks in front of the shops. This is the place where this model in Rome was born, being relaunched in various avenues in the previously constructed city. (…) So this has been an attempt, which has fallen through, to give the fabric of the fascist and pre-fascist city an axis of facilities where a citizen can go for a walk, go swimming in the pool near the lake, eat an ice cream, with the modular schema of the ENI as a backdrop. Then this attempt was swept away. On the one hand, there were the circles of “law 167” type settlements and Torrino district on the other, with the episode of the Olympic Games in between them including Palazzo dello Sport and the Velodrome» (From an interview with Antonino Terranova in E. Tagliacollo, La progettazione dell'Eur. Formazione e trasformazione dalle origini a oggi, Rome 2011).
According to Cellini (2001), “EUR owes a great deal to the curious arrangement of the urban and road layout that is axial (and classic) on a hilly system of relief apparently unsuitable for it. It can be noted how the two transversal axes (Congressi — Civiltà italiana and Forze armate — Santi Pietro e Paolo) are placed on two markedly arched ridges on hills, where the church and the Palazzo delle Civiltà italiana occupy the promontories, and where the public spaces (the park, the “Piazza Imperiale”, the lake) lie in the small intervening valleys. It therefore follows that the main axis of via Cristoforo Colombo, having been artificially flattened compared to its natural sinusoidal profile, lies on what till then was sloping undulating land. So the academic axiality of the spaces becomes blurred in the dynamism and variability of the surrounding built landscape.”

**U2.7 The new districts**

Not far from EUR and in very close relationship with it are several 1960s experimentations such as the INCIS district of Decima and some from the 1970s that have colonised pieces of the Roman countryside. Among the latter are Laurentino 38 and Corviale. Lastly, one contemporary experimentation is composed of Eur-Castellaccio.

Decima is a refined housing project with frontages that bend and buckle by moving their façades continuously. The design of the buildings follows the course of the roads, the ground floor with pilotis that elevate the building and free it, creating continuity with the green plane and the design of the previously mentioned green urban lounges.

The morphological structure in Laurentino explores the nature of the land which extends for 160 hectares and is formed of a crown of high ground around a valley earmarked for use as a public park.

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The project in Corviale takes up the lecorbusian theme of “city building” again and resolves it from the morphological point of view in the physical unity of the large compact horizontal “housing wall”. The section defines a continuous relationship between residences, social spaces, green areas, and services. This is a unique and unrepeatable episode.

The last offshoot of expansion to the south, Vitinia, is a large suburb similar to a village that had an initial planned form that has not withstood building without planning permission.

Lastly, several of the “rules” of the EUR project can be recognised in the plan for Eur-Castellaccio. The architects of this plan are Franco Purini and Laura Thermes together with “studio Transit”. A building in this plan is identified by its natural form as seen in the plan with green inclinations that is a geometrised hill and a section of the hill at the same time.

In conclusion, the contemporary image of the district from height suggests the need to extend the relationship of EUR with its surroundings, for example with the River Tiber that could become a linear park and with the districts that are the fruit of the 1960s and 1970s that have already made inroads into the borders of the pentagon. The system of green spaces could become, even more than it is at present, the project unifying and resolving the variety of spirits in EUR.
Chapter U3: Contribution of the working group

U3.1 Understanding the urban landscape of EUR

U3.1.1 INTRODUCTION TO THE WORKSHOP

The “urban group” discussed the factors related to urban growth and worked on a case study area of EUR. The workshop methodology was based on four steps. First, thanks to the detailed briefing documents prepared before the forum by the ‘La Sapienza Team’, the workshop participants were introduced both to the landscape of Rome and its region as a whole, as well as an in-depth introduction to the study area - the EUR district to the south-west of the city was provided. This information formed the first layer of participants’ background to the site.

Secondly, our own understanding of the general issues relating to urban and peri-urban landscapes, as well as our knowledge of similar areas and related projects flew into our analysis of the study area.

The third part of the process took place on site during the field visit when we collected specific impressions of the landscape we observed. To structure those observations the “urban group” was divided into smaller teams. It was proposed to organise the work during the field visit in three groups according to a simple structure relating to a basic typology of urban landscapes and their main functions:

- “Point” (focus on individual open space e.g. park, square etc.)
- “Line” (focus on linear spaces such as green links, infrastructure corridors, blue corridors etc.)
- “Area” (focus on characteristic open space patterns within typical sections of the urban fabric)

Within each of these groups it was suggested that three sub-groups concentrate on assessing different aspects of open space functions:

- Biological-ecological (climate, hydrology, flora and fauna etc.)
- Social-societal (leisure and recreation, contact and communication, health and well-being, experience of nature etc.)
- Structural-symbolic (legibility and orientation; meanings and values; genius loci and identity etc.)

The final piece in the equation was to write down the impressions from the case study area and to find the answers to specific questions which we formulated as a result of our analysis of the information provided and the visit to the site.

During the field visit to the site the workshop participants had a chance to walk through the central part of EUR district and also “catch its atmosphere” from the bus passing by further estates. Figure 3.20 shows the excursion’s route and visited points of interest.

Because urban and peri-urban landscape is a complex subject, and we had only a very limited time to visit the site it is important to notice that we tried to collect first-hand impressions of the landscape.

Fig. 3.21. View towards the lake (sketch taken during field visit by Carl Steinitz).

Map Legend:
A. Valle Giulia Faculty of Architecture (out of map)
B. C. The Lake of Eur
C. Palazzo della Civiltà Italiana (possible visit)
D. Palazzo degli Ubirli
E. Archivio Centrale della Stato (presentation area)
F. Quartiere Dacia DICIS
G. Quartier Laurentino NE
H. Quartier Vittoria
I. Vittoria

U3.1.2 FROM URBAN AND PERI-UrBAN TO METROPOLITAN LANDSCAPE

The developing mosaic of large city-regions forms the spatial foundations of a new system, whose internal and external relations and complex dynamics present a number of challenges to researchers and policymakers (Scott, 2001, p.813). As a result, ‘metropolis’ and ‘metropolitan area’, such as Rome, is increasingly the lens for research into urban transformation. Metropolitan territories are dispersed urban regions with distinctive spatial, social, and economic characteristics. Patterns of demography, commerce, governance, social behavior and cultural practices, and physical characteristics such as morphology, density and locality in metropolitan territories differ markedly from that of towns and cities. Historically, urban and rural realms were divided administratively, economically and in planning terms, but nowadays more and more voices are naming this an outdated concept (Sieverts, 2007; Wandl, 2012; Cortes, 2009; Nassauer, 2012), augmenting that “core city and urban fringe, centre and periphery, city and landscape, town and country, these dichotomies of classic cities and landscapes are fading, and a new polycentric, fragmented, and patchwork feature of urban landscape evolves” (BBR, 1998).

However, land use dynamics are particularly strong in the peri-urban zone. Such areas are currently growing four times faster than urban core areas, and at a rate which would double their total area of 48,000 km² within 30-50 years. Even in urban regions which are shrinking in terms of their population urban land uses are still expanding on the fringe. Therefore there is still a lot of research going on in these in-between-territories, trying to identify them spatially, develop planning strategies for them and find out design solutions which will serve people living in these areas.

Various terms are used to name the process of spreading of built up areas and the space which appears as result of that process. Urbanization, urban sprawl, suburbanization, dispersion, or fragmentation are processes which lead to appearance of new spatial forms termed urban fringe, peri-urban areas or territories-in-between. Research into territorial arrangements in metropolitan regions have resulted in a range of new insights on the form of the territory naming it as a “metropolitan area” such as Rome is increasingly the lens for research into urban transformation. Metropolitan territories are characterized by an amorphous patchwork of urban fragments in which the distinction between rural and urban realms is dissolving. According to Castells (2010), “it includes in the same spatial unit urbanized areas and agricultural land, open space and highly dense residential areas..., it is a multi-centred metropolis that does not correspond to the traditional separation between central cities and their suburbs”. The term ‘metropolitan’ broadens the meaning of what is usually understood under urban and peri-urban and includes the entire territory of the city-region.

**Metropolitan landscape**

A central problem in the metropolitan landscape is that of hybridization. In addition to the patchwork of industrial, residential, agricultural and open space territories in metropolitan areas, we also see the development of extensive hybrid tissues within metropolitan territories themselves. The majority of industrial, residential, peri-urban and mixed-use urban tissues in metropolitan areas are characterized by varying densities and forms of built and unbuilt space which differ markedly from that of compact (historical) urban tissues and open countryside. Viewed from the perspective of the urban realm, these conditions challenge existing categorizations and qualifications of urban tissue. There is a need to map the contemporary landscape by including the study of rural areas and open areas within urban areas since they are all part of this new metropolitan structure (Pinzon Cortes (2009)).

U3.1.3 PARKS AND OTHER OPEN SPACES IN EUR

The sub-team of “urban group” focussing on the individual open spaces grouped observed and visited areas into four categories: i) parks, ii) squares, iii) semi-public courtyards and iv) private green spaces, such as terraces and small gardens. Moreover, the selected green spaces were analysed in accordance to their predominant function (e.g. recreational, aesthetic...) and their hierarchy in space (e.g. regional / local importance in urban fabric).

The site visit encouraged participants to pose questions and rise important issues. For the better understanding of the site, the participants wanted to know:
- Who lives in EUR?
- Is there enough green space where people can sit in shade?
- Are there enough playgrounds?
- Is the area accessible for cyclists (also by the river)?

The understanding of above issues was essential to find associations and interactions with other case studies. In the following paragraphs one can find description of main individual open spaces.
The Central Lake Park

It was originally part of a larger and more articulated project, designed by architects Raffaele De Vico and Marcello Piacentini. The total design concept implied the creation of six new neighbourhood parks and an aquarium. Architect De Vico, considering the reduced budget, designed a simplified plan for the area, aiming at reducing the visual impact of the cylindrically shaped, newly built, *Palazzo dello Sport*. He divided the squared area in two sections, symmetrically placed with respect to the orthogonal axis: one, at the higher lever, with two spiral paths connecting to the Palace, and one, at the lower level, characterised by two large round areas, planted with *Cupressus sempervirens* trees, by two cascades, divided by smaller, irregular lakes and by lateral stairs. Two canals, tributary to the lake, present a series of smaller fountains and cascades on both sides, thus enriching the central system.

After a long period of abandonment, in 2006, architect Franco Zagari designed and realised a new bridge, ‘Hashi’ (‘bridge’, in Japanese) and a wooden terrace, ‘Cythera’ which reconnected the Garden of the Cascade with the pedestrian and cycle path, known as ‘Passeggiata del Giappone’ (Japanese Promenade), running along the full perimeter of the lake. View to the lake is presented on figure 3.21.

The country of Japan donated to Rome in 1959, 2,500 Sakura trees, the Japanese flowering cherry tree (*Prunus serrulata*). Many of them were actually planted in the EUR Park. Since then, the Japanese traditional practice of “hanami” (meaning ‘admiration of flowers’) typically takes place also in Rome during the flowering period of sakura (mid March – early April) and consists in walking under those trees and having a picnic in traditional costumes in the shade thereof. Poplars (*Populus spp.*), pines (*Pinus pinea*), and lime trees (*Tilia platyphyllos*), scattered, in small groups on the grass or placed along the pedestrian paths, together with many other Mediterranean shrubs, enrich the vegetal palette of the Garden.

Today, the commercial and sport uses of the lake and the green areas have significantly altered the style of the Garden. Several restaurants and bars, along the rivers, and sometimes even floating on the lake, together with playgrounds, summer festivals and extemporary markets, contribute to offer for visitors. The modern image is a much more confused comparing to the original intentions of the designer De Vico. One should remember that he was inspired by the much more “harmonious, classical spirit of the refined Italian villas”.

Other recent controversial episodes regard the proposal of the former Major of Rome to host the Rome’s Formula One Grand Prix in the area. After a long debate, the project had been abandoned. It was strongly opposed by the residents and ecologists.

According to some authors, the De Vico - Piacentini general design originally included an Aquarium, which has found practical implementation in 2011 with the beginning of the construction of Mediterraneum by EUR SpA. The structure, still incomplete and, again, not always favourably commented by architects, urban planners and population, is located on the northern side of the lake and has a surface area of approximately 14,000 sq. m.

The Gardens of Olive trees

The two small gardens, located symmetrically vis-à-vis the celebrative altar (where the Palace of Water and Light and the Adalberto Libera metal and concrete arch were supposed to be constructed) rise 2 metres above the street level and are barely visible from the surroundings after the construction of the more modern villas and buildings. They were not included in the original 1937-38 landscape plans, but were commissioned to Raffaele De Vico in 1940 and completed in 1952, with very little budget. Key design elements are the central water basin, surrounded by poplars (*Populus italica*), the grass amphitheatre, delimited by travertine slabs (typical Roman stone) and surrounded by olive trees (*Olea europea*).

Nowadays, only one of the two gardens is still open to the public. It is the one located on the west side, opposite the Fungus of EUR - a tower and water tank, 51 m high. It was realised between 1957-1959 by architects...
R. Colosimo, S. Varisco, A. Capozza and A. Martinelli

The garden keeps its contemplative and peaceful character, originally conceived by its creator, architect Raffaele De Vico (1881-1969).

After the European Landscape Convention, both the Central Lake Park and the Gardens of Olive trees have been included in the ‘protected zones’ of E.U.R., as defined by the Italian so called “Urbani Code” (2004) because of their high historical and cultural values. Unfortunately, this measure does not imply that they will be re-qualified in the near future, as advocated by the local community. Considering also the high level of uncertainty still characterising the possible outcome of the Mediterranean construction site, we can easily predict that EUR and its parks will soon be at the heart of the agenda of the newly elected Major of Rome, Ignazio Marino.

U3.1.4 LINEAR LANDSCAPE OF EUR AND ITS SURROUNDINGS

Linear landscape in EUR are the superposition of historical action about landscape. Can the structure and the hierarchy of spaces help the citizens creating a sense of quality for the open spaces of the city of Rome? The above question represent the interests of the sub-team focussing on linear structures, such as green links, blue infrastructure, etc.

Finding the typology of above mentioned linear spaces from the outsider perspective was one of the goals assigned for the workshop. The EUR district was built around in the second part of the XX century. The construction of the new settlement followed the idea of the modern period with the construction of hyperbuildings on the land connecting them by streets. In this process the great “stripes of highways”, the grey line connect the urban fabric with the hills around Rome and the agricultural fields.

Knowing each other surveying

Working on the topic of linear landscape in the context of city is challenging and might be problematic. The forum gathered representatives from different disciplines, e.g. experts of urban planing, architects, botanic, agronomics, etc. So, the first step had to be the creation of a “common language” (not only to understand the meaning of the word). Its also important to connect them to the object of the survey, apply to the meaning given to it by delegates of twentyseven European cultures.

The interpretation of the landscape during the survey passed gradually from an architectural one to a new one - collecting the view of the others participant. The most important part of the survey is to collect the impressions and to sketch them on a mental map. The goal after this moment was to cross the images impressed in the mind of the ‘traveller’ on a real map. By this operation, we wanted to find the structure of the places and their connections to the general structure of the city and the nature around.

The group discussed the typology of linear infrastructure and decided to divide them into three canonical groups: green, grey and blue.

Mapping the EUR

The individual understanding of the typology by each participant was elemental. This step caused a lot of disputes, as different educational and cultural backgrounds of participants caused diverse explanations. The major problems were related to the quality and the function of the linear elements constructing the EUR landscape.

Fig. 3.22. First sketch of green, blue and grey infrastructures.

The street of EUR by De Vico

The scheme proposed by De Vico is based on 8 boulevards. The typology of the different frame of the road was thought by De Vico linking the dimension of the street and the green system.

The landscape, trees, shrubs and flowers are very important to brake the monumentality of the Piacentini’s architecture made by white ‘travertino’ stone.

The green stripes between the new settlement

The green system of the EUR was thought by De Vico like a system of 8 parks connecting the neighbourhood with the agricultural system in the outskirts. For example, the Park of the Eucalyptus is the last remains of an old hood built around the 3 fontainnes, the place where according to the legend the head of the apostolo Pietro rolled three times on the ground.

All these green areas are now spaces in between. Even if not so well maintained, these spaces are loved by the citizens.
The blue system of the EUR lake
The last system of the linear landscape is the blue one. In the EUR district this layer is represented by the lake of EUR. This is important place for the Romans as it serves a leisure area. The different typology of function attract there a lot of people. For the construction of the lake, that took the place an old river, were used 2 acqueducts coming from west. In order to close the water cycle, the water probably goes to the Tiber, but the connection between the lake and the river - also visual - is stopped by a big construction / building.

A mapping strategy
The individuality of different typologies became the starting point for a lot of discussions about the meaning of different elements in the landscape. The big question is about architectural role of the landscape system or ecological ones. If the architectural system from De Vico works well, even if the cars invade the common space. The group could not say the same for the ecological net, because the road don't function like connection between the reservoir of biodiversity, the parks, and the agricultural zone around.

The sub-team of “urban group” recognized that is not possible to classify each typology of space in this few time with no information about it, so decide to create a scheme where each element is described in its importance related to three main areas: ecological values, social ones and the importance of them in a symbolical structure of the city.

With such matrix, the group was able to work together defining the different quality of spaces. Using the scheme, the group understood that the lake of the EUR is of a great importance for the inhabitants. It improves the quality of the place and living conditions, but it’s not able to support nowadays the ecological network. Using the scheme, the group found out that the blue elements of the Tiber represent a big element in a symbolical way and a big resource for the biodiversity. Between the EUR42 and the Tiber, the Strada del mare represents a wall for the inhabitants of EUR, that didn’t use the blue corridor like part of the city.

U3.1.5 THE LANDSCAPE OF EUR’S URBAN FABRIC
EUR area is composed of areas of different urban landscape qualities. The sub-team focusing on the general urban fabric of EUR considered that it can be divided roughly in four categories:
1) The area associated with the monumental architecture and associated landscape of the Musolini’s EUR, a rationalist construct, thought to live “mass experiences”. Nowadays those pedestrian masses have changed into automobile masses. Big expanses around grandiose buildings, associated with large axis using the existing topography to enhance the long views. Classical statuary is associated with the buildings. In terms of materials, the white surfaces of the travertine prevail.

2) The medium dense neighbourhood
Is there a sense of neighbourhood? It is an identifiable spatial unit to belong to? How it is organized? How dense is the traffic? How wide are the side-walks? What qualities has this area compared with other residential areas nearby? Is there an ongoing process of gentrification?

3) The low dense neighbourhood, houses and medium size buildings surrounded mostly by forums.
4) The external neighbouring living quarters.

Tab. 3.3. Examples of the green links elements in EUR districts and their functioning.

<table>
<thead>
<tr>
<th></th>
<th>Ecological issues</th>
<th>Social issues</th>
<th>Structural / symbolic</th>
</tr>
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<tbody>
<tr>
<td>Green infrastructure</td>
<td>1</td>
<td>0 / 1</td>
<td>0</td>
</tr>
<tr>
<td>(the green valley)</td>
<td></td>
<td></td>
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<tr>
<td>Blue infrastructure</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(River Tiber)</td>
<td></td>
<td></td>
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<tr>
<td>Grey infrastructure</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>(Mussolini axes)</td>
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<td></td>
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</tbody>
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1 – functioning existing value; 0 – not functioning, with potential

Fig. 3.23. Coarse defined map of built-up and non built-up areas divided by built areas density.
**Highlight / comments**

- Crowded and busy car lanes (streets) but not very walkable or enjoyable.
- Space devoted to cars is too great, there are difficulties to walk, to enjoy walking; Parks and green spaces (infrastructure) adequate in terms of extension.

There is an ongoing process of modernization, of change in the built environment. Different materials and/or location of building related with the street, change of height (related with the surrounding buildings) might change the landscape. This process couldn’t probably be stopped, although the main characteristics of the EUR Urban landscape might be preserved. One of the questions that arise during this study was: What are those characteristics?

**Water management**

It seems that the water goes underground. Even the lake...
is something unreal, not related with what the Tiber is.

U3.1.6 LANDSCAPE OF EUR DISTRICT IN ROME AS EMPOWERMENT FOR THE PUBLIC SPACE

Architecturally arranged landscape in urban areas has a strong potential to function as a public space meeting the needs of the users. The chapter analyses how functional and compositional arrangement of EUR district in Rome facilitates social inclusiveness and efficiency of the area as a public space. The methods of site visit, comparative visual analysis, research of archive documents and contemporary planning projects are used. The analysed EUR area is seen as a consistent part of the City of Rome as a whole on one hand, on the other hand it’s planning and construction in the short time period allows for the researcher to analyse it as a single urban entity with specially designated functional structure, outstanding composition and planning developed in clearly outlined boundaries. Analysis of extensive photographic material produced by the author of this chapter provides a real emotional impressions and rational opinions for a professional analysis.

The planning and overall arrangement of public space is used as a tool to facilitate social inclusiveness of citizens enabling them to develop locally acceptable communication traditions, habits and rules (Stauskis Eckardt 2012). Urban space is shaped by planning environment-specific and user-friendly arrangement of natural and man-shaped landscape, buildings and infrastructure elements to create and maintain specific areas of a space. Through many periods of historical development different approaches have been used to functionally and artistically arrange the new and existing public spaces and each and every case serves a study for the better understanding of how safe, comfortable and attractive spaces could be created and kept in different climatic and cultural environments. The case study of EUR district in the City of Rome gives a perfect material to share and learn by many landscape architecture professionals across the Europe.

The study of EUR area was performed in the aspect of analysis how efficient and functional is it as a public space. Especial attention was drawn to the application of landscape elements starting with planning, design and maintenance having in mind evolution of the area in time. The period of 75 years in which the area has been planned, constructed and managed is an extremely short period to the City of Rome still it allows to see how changes in social and economic life have influenced the

Fig. 3.26 (a-d). Initial planning of the EUR area and its change in time. The original plan from 1938 (a). The condition of the area in 1953 (b), in 1961 (c) and in 1967 (d). Photos:Gintaras Stauskis.
development of EUR area.

The original plans and drawings of the EUR area present the unique valuable material for comparative research of the planned at 1938 and executed as fixed in several periods in 1953, 1961, 1967 and the recent days. The ideological potential of the EUR district was certainly based on the attempts to create an impressive and monumental functioning system of public spaces as squares, avenues and lakeshore promenades with several landmarks - important architectural complexes as seen from the original map of 1938 (Fig. 3.26a). Until 1953 just few main streets were built (Fig. 3.26b). It took a time of more than two decades to see the first completion of the district urban structure in 1961 (Fig. 3.26c). The buildings and elements of infrastructure were the first elements to appear and landscape structures were still at its roots. This could be understood as a natural process of construction technology still the foundation for the main parks and squares was laid down at that time as well.

The scale character of architectural complexes developed on the main street of EUR is seen from the 1967 birds-eye-view picture (Fig. 3.26d).

Even for the city as Rome the sizes and scale of the constructed blocks seem exaggerated and over-dimensioned compared to the sizes and scale of adjacent landscape elements as groups of trees, adjacent spaces, river curves, land slopes.

The master plan of the EUR area designed by the architects, planners and politicians present a comprehensive plan that was drafted to realise the urban arrangement concept. As seen from the main map the master plan presents a combination of modernist planning introduced into the natural landscape. The impact of the Tiber River valley and the adjacent green areas on land marking the edges of the EUR area is especially evident (Fig. 3.27).

It is also observed that the master plan is created on the principles of separated functional zoning where different areas are assigned a dominating type of land use indicated by corresponding red, orange, blue, green, magenta and other colours. This reflects the tradition and fashion of the time where urban planning was seen as a tool for determining the dominating functional type of use in the taken parts of the planned area. The plan clearly designated land plots for the network of interconnected public spaces of the area as squares, parks and avenues. The amount of public space assigned for this type of use is big enough compared to planning and construction of the later years which supposes the big number of visitors planned to use these spaces.
The cityscape of the EUR area is based on the masterly combined grouping of natural and artificial landscape elements. This on one hand very naturally outlines the edges of the area without any physical borders. On the other hand it provides for the users an impression of presence of natural landscape in the big city and that is an outstanding achievement of planners, designers and those who were maintaining the area for more than seventy years. In this context the contrast between the rectangular composition of geometrical planning of the district and the natural volumes of trees and land shapes is especially evident and gives amazing impressions. This feature provides for the users of the area emotionally relaxing views out to the city and around the surrounding landscape which are inviting and welcoming to stay, observe and analyse the area and its panoramas. As a public assembly and communication area the space is open, has little sub-spaces and quiet spots for groups and companies. The movement is pre-arranged and has little flexibility of choice.

The open terraces around the buildings provide for the users several attractive spots for impressive and stunning views to the whole City of Rome. Being located on a high platform some spots of the area open the cityscape of Rome to the spectator. The views are mastered as a classical panoramic composition with several consecutive view screens: the front of terrace, the land around the plot with organic groups of trees, the next remote development and the distant skyline with memorable architectural ensembles. Being in the different distance to the spectator and having different urban textures and colours these views attract the human sight with plenty of elements to scan and commemorate. The presence of wide city panoramas around the main building of the EUR area is acting as an immense attraction for the users to come and stay here. Still the shortage of certain “comfort” elements limits the long-term functionality and usability of these areas.

Fig. 3.28 (a-b). The line of pine trees marks the edge of the EUR area (a). Identity of the EUR space is formed by monumental spatial composition at Piazzale Adenauer Konrad (b).

Fig. 3.29. Terraces of the buildings work as an important viewpoint towards the wide vistas to the city centre of Rome.
The presence of public space within the EUR area is mainly determined by the planning of the area that is based on a composition of two orthogonally intersecting axes - “decumanus maximum” and relatively smaller “Decumanus minimum” (Fig. 3.30). The proportion of height and width of space is comparatively wide enough >1:6 (Fig. 3.30b), and probably for this reason it is subdivided by the lines of trees into smaller spatial corridors to the ratio >1:2 on the perpendicular avenue (Fig. 3.30a). This approach is used to create more human and more user-friendly - in terms of climate - spaces and walkways to travel around and experience the area from the inside. Still, in many cases elements of landscape are used in a more formal and decorative way as they outline the formal planning axes but do not subdivide the wide space of the “street” and do not create a human space for comfortable walking and featuring the space as an arena for public interactions.

Another shift in the usability of the area is seen in absolute abundance of cars parked all around in the spaces on the main compositional axes. Negligence of the parking issue and the need to provide for the users a more sustainable and visually less destructive solutions brought the EUR area to one more car-polluted district in no way different from any other city area in Rome or elsewhere in the world. The chaotic way of parking the vehicles is seen as a major limiting factor to functional usability and aesthetic value to the place as cars prevent seeing the spaces as intended by the designers in forties of the 20th c. In this context it is evident that wider introduction of landscape elements and integrating them to planning and spatial composition of the area might create better options for solving this obstruction by traffic problem at EUR.
Introducing buildings to the EUR area evidently follows the planning pattern of forties of the XX-th c. which is based on a modernist design tradition of urban edges, axis, districts, landmarks and links in between of them. Naturally this type of planning consequently brought the type of architecture which is laconic, monumental, and impressive and has neo-Romanic and neo-Classical features. The buildings of the area are masterly implanted into their sites with especial attention to their visual importance meaning view on the plot from the surroundings and view out of the plot to the city. Both directions of visual composition are equally respected in planning of buildings and the areas around them. The close adjacent areas around the buildings feature an attractive terraces and outlook spaces opening a wide and long range views to the City of Rome where plenty of memorable ensembles could be observed from a long distance (Fig. 3.31). In this way the users of the EUR area are provided with masterly designed spots and monumental spaces for recording memorable views of the city.

Still the design of these areas breathe as formal and limited usability space having in mind the specific features of local climate, absence of shaded rest areas and lack of green surfaces and abundance of stone paved plains in the immediate vicinity to the buildings the place (Gehl 2010). This could be understood as a composition measure to create an unobstructed view around the monumental architectural objects and leave all the above mentioned comfort features for the surrounding landscapes. The spatial arrangement of the monumental square allows for the user to expect that monumentality should flow through the whole area with all its fountains, axis, seats, promenades and artistic sculptures (Cullen 1971). What we see instead is a modest minimalistic and quite formal layout, certainly judging on modern art by today’s taste and tradition.

The functionality of the public space at EUR and elsewhere is determined by the general urban planning, the design of buildings and spaces around them, also by the functionality of the spaces and its elements around. The technical quality of many public areas is bad at EUR because of a very simple and very important issue of broken sidewalks and unworkable pavements. This feature limits usability of the space because of functional errors and poor technical and visual condition that compromises safety for the users and at the same time signals issues of personal security as well (Dadd 2010). The latter feature seems as having especially great impact on the users coming with families as bad visual quality signals danger to the users.

Fig. 3.32. Technical condition of pavements in the EUR area limits the functionality and comfort for the users.
U3.2 EUR in Context: Learning from Comparative Case Studies

U3.2.1 INTRODUCTION
As a largely 'self-contained' urban expansion project built to embody a particular set of ideological beliefs and thus a reflection of its time, the EUR in Rome is, of course, unique. There are, however, many other examples of initiatives with a similar objective of creating new 'free-standing' urban districts as additions to existing cities, but which took place in different geographical and ideological contexts as well as at different times over the last century. These can serve as interesting comparisons to help place the planning and open space concept exemplified by EUR in the wider context of changing fashions and trends in urban design and open space planning. This section, therefore, aims to consider briefly a number of other such high profile, ideologically driven urban expansion projects which have been developed both before and after EUR and indeed up to the present day. The comparative projects considered in this section are:

- EUR, Roma: Masterplan design c. 1938/39 Area c. 400 ha. (Fascism)
- Kraków, Poland – Nowa Huta: Masterplan design c. 1949 onwards (Socialist Realism)
- Milan, Italy - the gronda nord in Quarto Oggiaro Neighbourhood
- Vienna, Austria – Seestadt Aspern: Masterplan Design Tovatt Architects & Planners c. 2005 Area c. 240 ha. Post-modern formalism

Each of these projects can be looked at as the product of imposing particular planning and design ideologies on to green field sites close to the edges of existing large cities. All of them, in their way can be said to be trying to create their own particular utopia in conformity with certain social or political ideologies and in most cases in contrast or even direct opposition to the urban development of the rest of the cities of which they were planned to be a new part, but which all appear to have more in common with each other than one would at first superficially expect. Despite the century of time and the seemingly vast ideological gulf which separates the projects from fascism to Stalinism, from social reform to post-modern formalism, all of them have in common the important role afforded to landscape and open space in shaping the public realm.

U3.2.2 HAMPSTEAD GARDEN SUBURB, LONDON 1905

Background
Hampstead Garden Suburb can be characterised as an ideologically driven urban extension project located on what was then the north-western edge of

Fig. 3.33. Aerial view of the Suburb showing the formal central square with its two Lutyens churches
http://www.myoops.org/ans7870/11/11.001j/f01/lectureimages/6/image37.html
London. Its immediate cause was to be found in plans for the extension of the London underground line to Hampstead, an attractive and still semi-rural area on the edge of Hampstead Heath, in the early 1900s. These appeared to bring with them the threat of a continuation of the un-checked and faceless suburban development that was the result of London’ fivefold population growth during the 19th century. But whereas part of the motivation behind the project was to help preserve the environment around Hampstead Heath, the other part of its inspiration came from the social reform movement with its aims of improving the lives of the deserving working classes. The whole project was clothed in the ‘Arts and Crafts’ aesthetic of the recently founded Garden City Movement, and was planned and designed by Raymond Unwin and Barry Parker, the architects of Letchworth, the first Garden City (1903-04), which was being created at much the same time.

The initiative and idea for the creation of Hampstead Garden Suburb came not ‘top-down’ from an ideological government but rather ‘bottom-up’ from the idealism of a private individual, the social reformer Henrietta Barnett. She was the well-to-do wife of Samuel Barnett, a clergyman whose parish was in the poor East End of London, but someone who moved in circles influential in the social reform movement and was closely associated with, amongst others, Octavia Hill – one of the founders of the ‘National Trust for Places of Historic Interest and National Beauty’, established in 1894.

The Barnett’s found relief from the stresses of life in their East End parish, in the form of a weekend retreat close to Hampstead Heath, which they purchased in 1889, and it was there that the plans for the creation of the Garden Suburb developed. The first stage was a campaign for the extension of the Heath on land owned by Eton College in order to protect this from development, but in order to help finance this, it became clear that a scheme to protect the Heath would itself need to include a development project. The idea of a ‘Garden Suburb for the Working Classes’ was first published by Henrietta Barnett in 1903, and she assembled an influential group of backers to support and help finance her plans for the purchase of the necessary land. Building work commenced in 1907.

Planning and Design

Between Henrietta Barnett’s publication of her intentions to create a garden suburb and the start of construction on site in 1907, the first layout plans were prepared by Raymond Unwin. These were able to drawn both on his experience with the planning of previous projects at New Earswick near York and at Letchworth, the first Garden City (1903-04), which was being created at much the same time.

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Planning and Design

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A second consultant was subsequently appointed by the Hampstead Garden Suburb Trust, one Edwin Lutyens, the archetypal architect of the British Empire, and one whose later classical and monumentalist work at least, contrasts considerably with the cozy small scale domestic approach of much of the Parker and Unwin style. Lutyens' work was, perhaps appropriately focussed on the development of, what eventually became a much more formal layout for the main square with its two churches.
A critical part of the concept was the road layout and the associated building lines, with the emphasis being to view the roads as being important public spaces, which would determine the overall character and effect of the new development. In order to achieve the desired road layout and overall urban design character, it was first necessary to change the local by-laws, which had recently been re-written in order to allow for wider roads. Instead, Unwin was keen to define small-scale enclosed street spaces, and in order to achieve this goal it was necessary for a special Act of Parliament to be passed which exempted the Hampstead Garden Suburb Trust from the local by-laws and empowered it to make its own.

In this context, particular attention was devoted to designing road cross-sections. The possibility opened up by the Act of Parliament meant that less land needed to be devoted to roads and more could be used for gardens and open spaces. As stated above, the roads themselves could also be designed differently to give them the character of open spaces. Carriageway widths were reduced and footpaths were sometimes omitted altogether, being replaced with grass verges. Nevertheless, despite this provision, the distance between houses facing each other across a road had to be maintained. The road layout too was carefully designed in order to give an organic feel and to orchestrate views and sight-lines. Attention was also given to the design of building lines in order to be able to define groups of houses, while the careful positioning of buildings around road junctions allowed for the definition of visually enclosed spaces in line with the principles enunciated by Camillo Sitte.

Further open space elements which were important in helping to define the overall character of the public realm within the Garden Suburb included ‘village greens’ and open courtyards, as well as the provision of areas of allotment gardens where tenants could grow their own vegetables. In addition existing areas of woodland were retained and made freely accessible to all residents. The main formal open space was the central square, which was identified at an early stage by Henrietta Barnett as the centrepiece of the Suburb where the main public buildings were also located.

The Hampstead Garden Suburb Act of 1906 is considered as the first specialist town planning legislation in Britain and formed the basis for later national town planning legislation. It also required the Garden Suburb to be created for people of all social classes, and called for the provision of gardens and open spaces as well as other ‘special amenities’. In addition it defined the average residential density in terms of eight houses per acre (approx. 4000 m²). While Unwin made use of the Act to define a varied typology of streets and road cross-sections, the design of the buildings was left largely to the individual architects.

Parker and Unwin themselves were responsible for designing and building many of the characteristic Arts and Crafts ‘vernacular’ style houses and cottages in the suburb, while their ‘consultant’ – Edwin Lutyens was responsible for some of the more formal buildings and in particular those on the main square. He designed both of the two churches, one with a spire the other with a dome.

Fig. 3.35. View of newly built housing across the on-site builder’s yard in 1909
http://www.hgstrust.org/history/images/photograph_4.jpg
Henrietta Barnett’s idealistic aim was to create a not just a new development, but a social experiment – somewhere where people from all social classes could live together in well-designed housing. Initially this goal was successful, but as time went on and the Suburb expanded, more commercial objectives began to play a bigger role and the original Trust which defined the initial principles for the Suburb, began to lose influence. Today Hampstead Garden Suburb is regarded as one of the most desirable areas to live in London and as a result has some of the highest property prices in the country. The list of famous people who live or have lived there bears witness to the ultimate failure of this social experiment as a means of bringing together people of all social classes.

Although the planning and design principles of the first Garden City at Letchworth were also applied by Parker and Unwin at Hampstead Garden Suburb, it nevertheless departed from Ebenezer Howard’s vision for a ‘true’ Garden City, in that it was not an economically self-contained settlement well away from the catchment area of an existing city, as he had envisaged. Despite this, it is regarded as a highly successful example of early British town planning. Its initial egalitarian social goals were certainly in line with those of Howard, and its enduring popularity as a place to live – now for relatively wealthy residents, reflects the success of creating a planned development in which landscape and open space played a central, if not explicit role – except perhaps in the name of the project.

Fig. 3.36. Later plan of Hampstead Garden Suburb showing extension of the development to the North after the First World War
http://www.myoops.org/ans7870/11/11.001f/01/lectureimages/6/image36.html
3.2.3 Nowa Huta - the socrealistic city

BACKGROUND, IDEAS AND HISTORY OF CREATION

The reason to build The Nowa Huta city were not only economical, but also political. The economic motives were strongly related to the “six years long plan” (1950 – 1955) - tough and rapid industry development plan for Poland - what was treated as a base for socrealism. The metallurgy and machine industry, important in military in case of new war were introduced.

At the end of 1946, Josef Stalin proposed President of People’s Republic of Poland - Boleslaw Bierut - to locate in Poland the great ironworks. There was no chance to reject such proposal. There were 3 serious proposals to locate the new factory – including area between Gliwice and Pyskowice. But this region had belonged to Germany before second World War and in case of a new war it would be probably to lose the factory. It was decided on 1st of February 1949 to locate ironworks nearby Krakow. The region has very fertile soils and it was very intensively cultivated. Because of the cessation, many farmers lost their land and harvests. It is said that the government payback just 5 – 10% of lost value. Krakow as a historical and cultural capital of Poland, started to have new socialistic neighbours with new citizens - symbols of new builders of new Poland.
Before the master plan of Nowa Huta was completed, it was announced a competition for housing estate. The winner was Franciszek Adamski. According to his project, the first stage was to build two floors gable multifamily houses with no services in the ground floor. The shape of the buildings refer to houses in the riverside district in Warsaw to – the Mariensztat – the housing estate rebuilt as a first of all areas completely destroyed during Warsaw Uprising of 1944.

In Nowa Huta for the first there were built the peripheral working class houses. It was said that the bricklayers’ team needed to practice before realisation of central district. The districts named „Wandy”, „Na Skarpie”, „Teatralne Krakowiakow”, „Górali”, „Sportowe” and „Zielone” were first completed.

The metallurgical conglomerate and the habitat were situated on an area of 76, 42 km². According to the plan, the living district should be ready to use two years before the factory. That is why some of the buildings were constructed with no architectural plans. In 1949 architect Tadeusz Ptaszynski became a general designer and project manager. The fact that the master plan and some building projects were completed after realisation of investments created many complications. It needs to be said that the functional programme of the city was done in 1950, a year after first building works were started.
The project of the central part of the city was completed in May 1952. There were located eight floor residential blocks with shops and other services on first and second floor. The buildings of administration were concentrated around the Town Hall square. The cultural institutions were located at the Central square, were also was special area for a monument as a symbol of relation between the city and the conglomerate. In the Cultural Houses, there were a library, a theatre hall, a bookshop, a day-care room and a restaurant. Also the sport objects and sport equipments attracts the architects’ attention.

The main rounds of travel shows the main directions and were treated as a symbols – „the axis of conglomerate” was the „axis of work”, and „the axis of city centre” which linked Century Square and Town Hall Square was the “social axis”. Along the “social axis” were located party’s head office, trade union and social organisation offices. In the city hall was planned to place a Regional National Council. The northern part of the promenade was designed as a walk promenade. In September 1952 were finished the plans for building around the Central Square. The next year it was given the names for the main streets in the city – e.g. The Lenin's street, Leader Workers’ street, 6-year plan’s street.

According to Tadeusz Ptaszycki’s vision, the city was planned for 100 thousand inhabitants. The main streets of Nowa Huta give shape of an isosceles triangle. On the southern east, it is enlarged by housing estate complex – Na Skarpie and Młodości. All main roads were located by using historic routes, e.g. first was completed Kocmorzyckiego street, with partly kept old trees. It is former road leading to Sandomierz. The residential area was separated from the conglomerate by 1.2 km wide belt of open space with greenery used for recreation and sport. In the urban communist ideology, squares and arteries had very special role. These were spaces for manifestation in communistic views.

All the factors cause that Nowa Huta invokes to Haussman’s conception of urbanism, tradition of neighbourhood units and garden city movement. The main sectors with central districts for 15 thousand inhabitants are divided in to subunits for 5 thousand inhabitants and a school in the centre.

The urban concept is based on central square, were stars the main roads of travel. All of the roads have a tramline except The Rose avenue, which is directed to the north. The Rose Avenue is 50 m wide, has greenery reserve between buildings and roadway. It stars in Central square and ends in front of gate to stadium „Wanda”. The Rose Avenue constitute the main axis of symmetry of urban sectors.

Main roads of communication devide Nowa Huto in to sectors and create a frame that is individual for each sector. The streets start in sector D are not straight continued is sector A. Therefore, the layout is symmetric but only in outline.

The Sectors are divided in to units. Each of unit is an independent district with school, kindergarten, day care centre, bars and restaurants. In addition, the spatial structure was organised in terms of altitude. Low freestanding buildings surrounded peripheral estates. The cubic of objects increases towards the monumental area of Central Square.

Fig. 3.41. Block of flats number 7, Centre housing estate, Sector D, 1963, (From collection of Historical Museum of Cracow, fot. D. Zawadzki, www.architektura.muratorplus.pl, 2013).
In terms of stylistic architecture of Nowa Huta, it is very diverse and reflects the character of the individual quarters and neighbourhoods. The buildings around the Central Square and the main streets refer directly to the demands of socialist realist architecture. Particularly noteworthy is the neoclassical architecture of the buildings located at the Central Square designed by Ingarden. The distinctive compositional distribution is based on among others a tripartite division of the facade and the use of arcades in the blocks immediately adjacent to the square. Some of architecture researchers compare the Administration Centre of Nowa Huta steelworks to the Doge's Palace and the Vatican.

It needs to be mention that Nowa Huta was never finished. The lack of important elements can be seen in the centre. Since the implementation of the full program was abandoned around 1955. Construction of a community centre has been abandoned in 1953. There is no Town hall with a high attic, heavily accented portal, spreading staircase and monumental tower. Also further projects were foregone: There is no Cultural House with two floors colonnades in the southern frontage of the Central Square and the great obelisk in the middle of that square, which was supposed to be visible from anywhere in Nowa Huta. It was abandoned the decoration of buildings like sculptures and reliefs.

In 1960, it was calculated that in ten years built 50,000 chambers in 18 thousands of apartments, 90 km of streets with pave roads, 550 km water supply system, sewerage system and heating system, 15 school buildings and hospital for 840 beds.

The society of Nowa Huta
Construction of a new town caused that mainly the villagers settled there, who came here in the hope of higher wages. Most of them had no idea about life in the city, so there were cases of farming poultry or pigs in the bathroom or walking in a bathrobe and curlers on the streets. The new community built by the poor from the countryside and criminals forced to come the site. The reports indicated that in Nowa Huta were cramped conditions, vandalism of property, there was neglect in health care, thriving prostitution and drunkenness, corruption and theft accompanied by new investments, and there were a lot of problems with new workers.

Nowa Huta nowadays
Unfortunately it is easy to find an urban intervention from seventies and eighties. As a mistake can be treated a ten floors block of concrete slabs or closed the Rose Avenue by accidentally located detached housing estate. It needs to be said that very late there were located churches in Nowa Huta. Thirst was church on the Glass Houses district. Then in 1998 the church designed by prof. Witold Cęckiewicz was built and since that time the Sacred Heart church is still under construction. A few years ago, there was an idea of involving the Nowa Huta on a list of monuments, but it was not realized. Currently Nowa Huta is protected under local law, which seeks to determine the barriers to transformation that could permanently change the character of the place.
3.2.4 LANDSCAPE STRATEGY FOR THE NEW MILANESE METROPOLITAN AREA

In the last decades, Lombardy became one of the Italian Regions driving a change in the landscape planning creating greenways, green belts, and penetration areas through the urban consolidated tissue. This was a slow but very important work conducted in parallel with the construction of new infrastructural structures. A lot of projects tried to solve the main problem the typical Italian political fragmentation let to the last century planning programmes, creating islands containing every function inside of them. With the introduction of the Regional Law that transformed the “PRG” (Urban General Plan) into “PGT” (Territorial Administration Plan) the Municipalities could asked to create a new kind of planning process where the plan can affirm its rules over a wider part of land, trying to glue the fringe of the cluster. To approve the PGT it is compulsory to prepare a “VAS” (Strategic Environmental Assessment) making a comparative study about the impact of the new constructions in the different contests.
In 2005, the Regional Law n. 12 produced several improvements for the landscape assessment, through the capability of the General Plan to receive contributions from different type of processes, and to recognize it like part of it. This procedure and the work made by a lot of associations and citizens create a lot of experimental practise able to discuss on landscape in a different way regarding the Italian's old one. These examples want to change the way to think about territory from a human being centred vision to another one more careful about nature and wildlife trying to allow them in collaborating together.

This is the context where the case study presented in the next sub-chapter origins. His force stays in ruling the space creating a mainframe that reconnects areas and gives continuity to the landscape through one of the main European corridors (the River Ticino Valley) from Switzerland to the Po River till the Adriatic Sea. All the work made in the last decades tries to solve a problem only the actual world economic crisis could solve the land consumption. The disappearing of the industrial sector opens the door to the logistic and services one, fields needing more and more infrastructures to connect and transport goods and people.

Having won the 2015 International Exposition, Milan will attract many investments helping Italy to escape from the 2008 crisis, but creating new spaces able to attract people and goods during the EXPO’s 6 months in 2015 Milan is risking the loss of an enormous amount of green areas involved in the construction of new infrastructures and buildings. Hopefully, Municipality and enterprises should take in account the enormous fatigues done to react to the industrial crisis in the 90s, but this is not sure at all.

**Regional landscape trends around Milan**

In the last 20 years, all the areas of the Po Valley had an enormous development of construction. The index of the land consumption reached in some case the 4.39 hectares for citizen. The national law introduced in the 1991 the Protected Areas. The law generated a great environmental movement that tried to develop natural areas and sanctuaries were the human beings respect the ecosystems’ time and spaces. At the same time the law generated also, the idea that all the territories outside the “Natural Areas” borders can be used alike a ‘tabula rasa’ for new development and constructions. Facing this problem Milan the administration all around Milan pushing by association and citizens recognised the importance to create an integrated green system. The ”Parco delle Groane” for examples is a regional park with an extension of 3,600 hectares and probably represents the Southerner moorland of Europe. It resists to the pressure of Milan, Saronno and Rho urban areas to preserve wide wetlands, that are very important for many migrant birds’ species. Natural areas work altogether with the “Navigli Canals System” centred in the Ticino Valley Plan was organized in 1973 and represented the first Regional Park in Italy. Its extension is more or less 91,000 hectares and connects the Maggiore Lake with the Po River. In 2002, the Park received the mention by the UNESCO of Riserva della Biosfera (Biosphere Sanctuary).

The Ticino Park has an enormous importance in the equilibrium of the Region representing one of the main axes of the European Ecological Corridor, allowing the free movement of an enormous amount of animals. “TIB – Trans Insubria Bionet” is an experimental project for the reconnection and de-fragmentation of green areas in the Lombardy’s Province of Varese:

Projects like TIB are so important because the correct development has a ripple effect on the landscape, pushing other authorities to treat not-built areas like important places, valuable like they are, for not only living or working. Solving the fragmentation of spaces is not a simple question for a society whose territory is a hand-made product developed century after century. The concept of green net and ecological corridor has to be explained to the citizens also in a functional way. Seems strange to say that, but for the citizens is not so easy to think about the landscape valorisations. Facing the crisis Public administration has more and more interest in educate citizens and landowners to qualify the landscape resources. We need only to think how to improve the participation of landscape-maker to reach the goal of land continuity.

This is the case of all the areas around cities. To answer the problem Regions as Lombardy introduced experimental areas to connect the Natural Areas stopping land consumption, preserving biodiversity corridors and improving the quality of the Flora and the Fauna. This policy instrument called “PLIS” – Parco Locale di Interesse Sovra-comunale (Sovracommunal Park) was created by the Regional Law n.86 of November 13th 1983 but was largely used only from the ’90s.

Such areas largely are along the secondary rivers; less controlled then the main ones. The poor attention about the state of the ecosystem of the surface-water creates an extremely dangerous situation for people and the environment. The PLIS, if well programmed and equipped with tools and instruments to control the areas, can act like a coordinator for the other authorities, linking them with the operator on site. Around Milan “Parco del Lura”, characterized by a polluted “red” river course, and “Parco della Media Valle del Lambro” work with the Politecnico and University of Milan to create an experimental phytoremediation plant and to recreate a balanced environment on the North and East of the metropolitan area of Milan. The ‘Centre for Urban Forestation’ in Milan, with its consolidate experience,
collaborates with them to promote actions to encourage the land-management directly involving the citizens. “Parco del Lura” in example works to promote little projects with a deep impact on the society like the seeding of Popping and Cornflower in the wheat fields. “Parco della Media Valle del Lambro”, is trying to introduce policies and instruments on the Eastern boundaries of Milan. This area, together with the “Parco delle Cave” (Western Milan area) recovered nowadays after years of exploitation, is not able to regenerate itself. The 2008 crisis stopped a lot of projects done on the areas, so the local administrations tried to develop some inclusive practice to manage green areas. One of these projects was the Bergamella’s vegetable gardens. Some facts and figures of the project: from October 2011 till January 2013, 783 working days, 3,083 certificated working hours, 62 citizens-workers (and their relatives); 15 q of Eternit, 4,830 q of mixed garbage, 3,460 q of construction materials, 83,6 q of plastic, 1,820 q of wood removed.

The project included also the “owners” of the previous illegal gardens in the removal of all the former structures, saving money reinvested completely in the construction of 50 new gardens with common spaces and woods structures. Landscape became not only a theme of material construction, but also the creation of a place ‘common sense’ and a moment to recognize the ‘common value’ to the environment. So, the former “owners” of the gardens enter in a democratic system, participating in the demolition of the old structures earning ‘points’ for the assignment of the new structures and 50 square meters garden parcels.

Building the ecological network for a Great Green Milan before the EXPO 2015

A quick view on the green structure of Milan, like an x-ray exam, underlines that the metropolitan area has two different structures. The first one on South called “Parco Agricolo Sud Milano, extends its border on 61 municipalities and 1,400 farms. PASM is an agricultural area having a crescent form, where is largely cultivated in wheat and rice. In the North of Milan we can find an opposite situation where the urban growing follows the logic of the sprawl. The city fuses its borders with the hinterland, creating a continuous urban tissue one can see till Switzerland, through urban areas like Varese, Como, Lecco, and so on. More, by January 1st, 2014 Milan will be no more a mere “city”. The borders of the actual Province of Milan are going to become the new “Metropolitan City of Milan” with 3,114,508 inhabitants.
Milan after Milan will pass from the historical “Duomo” centric vision to an ecological new one. In the boundaries of the metropolitan areas, one can find the productive system well connected with international and regional transportation system. In these middle marginal areas becomes more and more important for the wellness and the life’s quality. In the West side of Milan there are a big areas taking a great importance in an ecological connection strategic vision. This area situated between the Ticino River, the Malpensa Airport and the Western suburbs of Milan. Fragmentation of policy creates a not homogeneous system that is always near to collapse for pressure and pollution problems. During the last 30 years some initiatives tried to repair the lack of attention about these areas. The first one was the process begun by CFU (Centre for the Urban Reforestation) with Italia Nostra to rehabilitate a derelict gravel pits area. In fact, the CFU founder betted on the recovering of the “Parco delle Cave” area, and one of the most important moments for the park creation was the campaign for the “reconquering” of the territory from the not appropriate uses that found place in the area after the end of the excavations. This strategy based on minimal interventions, restored -year after year- something like 135 hectares of artificial lakes, woods, abandoned vegetable gardens, etc. In the ’90s asleep citizenship were not able to propose a solution for the areas, so Municipality had designate a group of experts to design the park, independently from the public opinion. This freedom of choices allowed the designer to create a little wetland where ‘cultivate’ biodiversity typical of the wet areas. Nowadays the lakes, the wet area and the farm are the main attraction of the Park visited every year by thousand of schools and people.

“Parco delle Cave”, “Boscoincittà” and “Parco di Trenno” are the Western spine of the green net of Milan. The three areas, each one with a high value, are split one from the other. This condition does not help the territorial continuity that is essential for the connection between the core areas of the ecological net. All around the parks, fields and agricultural areas have to be the corridors to link the core areas all together inside the urban belt. Working hard to improve quality of the land assessment, varying the plantation techniques, introducing hedge and rows of shrubs and trees help to improve the condition of this urban environment.

In the last few years the oil cost grew-up and a new students and younger’s life-style is imposing in the Milan a new debate on the presence of bicycles. Following the biggest capitals in Europe, Milan is now creating an organic system of bike sharing, that day after day is extending its station to rent bicycles. After what happened in London and Paris, the bike movement “salvaciclisti”, born as a defender of the slow lifestyle, is now promoting some change in the open spaces and their policies. “salvaciclisti” campaign uses the media passing information and suggestions to car drivers and pedestrian about little actions to respect the others typology of mobility. After the success of April 28th 2013 manifestation, the movement helped by a historical association, drafted some proposition to the Municipality. Milan is becoming more and more bike-friendly, even if its structure and infrastructure are not so prepared for hosting all the typologies of transportation. The success of the campaign “Go to School by Bike’ presented in Reggio Emilia in 2003, now on promotion in Milan, is stimulating parents to accompany children to school shepherd by a bike “critical-mass” that protects

Fig.3.47. One of the lake of parco delle Cave.
them by any “cars attack”. This campaign is now is exporting also in Rome, Naples and Bologna after other successes in pioneers cities as Bari, Pompeii and Rho. Like all the International Exposition also the Milan's one will become the moment where take care about the land structure with good policy. Landscape is one of the indicators of the trend the city will decide to take. The trend to develop new and organic green areas creating a continuity to build a regional ecological net can develop also thanks to the new movement to change the private mobility modal split, helping the public transport to became more and more used and efficient. Moving people from cars to other greener typologies of transportation is useful also to reduce cars impact on the city, needing less and less infrastructure to manage the incredible flux every day present on the streets and highways through Milan.

A lesser pressure on the urban structure could help in the diminishing of the necessity to build new strips of asphalt in-between the buildings, letting green and empty spaces free to become common places.

**Expo 2015 – a lost opportunity or still a chance?**

Milan changes were slow and deep. The urban tissue are so dense that also real estate need a lot of time to build new part of the city letting the citizens and institution get use to them. Expo 2015 accelerate the way to think the city, pressed by the time goes fast. Milan just received the participation for the exposition by the majority of the nation so the fair will be a big attraction all over the world. To host all the people coming in 2015 city decide to build the site not in Milan municipality area but in an empty area on the north-western part of the city, more or less 10 km far from Piazza del Duomo.

The area hosting today only the jail of Bollate and the Postal-sorting centre is preparing for the big structure thought by Stefano Boeri where the pavilions of nations are going to stay in the middle of a big garden representing the five continents. In the planners ideas the area after the expo will be a new part of the great Milan offer many square meters of parks, water structure and loisir areas. Even if the presentation of this new part of Milan are fabulous, like Expo campaign have to show, we can say that the area is an enormous enclosure fenced by any sort of infrastructure. Highways and railways create a wall not easy to cross without a means of transport. The choice of the area was strategically link to the infrastructure present in the surround: Highways, railways are connecting it with the European corridor north south and East west.

In the mind of the architects were a dream to link Expo site by a canal to Villoresi canal on north and Naviglio Grande on south.

**Vie d’acqua**

One of the main visions for Milan EXPO 2015 is the project Vie d’Acqua that wants to rehabilitate all the path of the Navigli all around Milan. The project does not want only to restore the old Navigli net, but thanks to the introduction of a new artificial canal, it will connect it with Villoresi and Naviglio Grande ones. Aim of the hydraulic project is the introduction of a bypass for the water allowing the continuous flowing of the Navigli when repairs are needed to the part inner the city. In contrast with the expectation, executive project foresee a not navigable canal with all along a new a bicycle pathway connecting Park Ticino ones with the Milanese bicycle net.

The layout of the project presented passing through the existing areas of Parco Pertini, Parco di Trenno, Bosco in città, Parco delle Cave and Parco dei Fontanili cuts most part of them in the half. Citizens, administration and parks offices are so upset for this project, especially in its “water” part for the large amount of problems the infrastructure will create without providing any new opportunity. In the end we can think about the project linking expo site to the city that are quite modest for an international expo centre the vision on the spot ‘Feeding the planet, Energy for Life’. Without any solution more the one presented until now, we can say that the 2015 for Milan does not change like in the preview the modal split, and the habits of the citizens. Reasoning about green areas and agricultural field the hope is to see after 2015 some innovation in the cultivation strategy passing more and more to a different life style trying to preserve land quality, vegetal diversity throw a more careful approach to the agricultural sustainability than today. Only in this way we can really connect all the Great Area of Milan in a continuous tissue innervated by Ecological connection.

**U3.2.5 SEESTADT ASPERN, VIENNA 2005**

After a long period of declining population; which began with the end of the Habsburg Empire in 1918 and ended with the fall of the Iron Curtain in 1989, Vienna's population has started to grow again. This has created the need for a new wave of urban expansion, and the latest urban development project – the Seestadt Aspern - which is planned as a new urban centre for 20,000 people, is being constructed on the far side of the Danube, some 17 km from the historic city centre . About one third of the present area of the City of Vienna lies across the Danube, but for most of the city's history, it did not belong to Vienna, and as a result it now presents the greatest potential for the growth of the city. Here, on the former site of Vienna's first airport, which opened in 1912, the city's largest and most ambitious urban expansion project has been under construction since 2010. Like the EUR project, the Seestadt Aspern, which translates roughly as 'Aspern Lake Town,' represents a self-contained attempt to create a modern urban development reflecting what are seen as the latest architectural, planning and landscape concepts.
Background – the development of ‘Transdanubia’

By the end of the Austro-Hungarian Empire in 1918, much of the existing area of the city was already built up, but from 1908 the area of the city expanded across the Danube to take in almost half as much land again as the imperial capital had previously covered. In the period leading up to the First World War, the population of Vienna was larger than it is today at over 2 million, and still growing.

The expansion of the city across the Danube was made possible as a result of the regulation of the river, a mega-project which was started in 1870. It was achieved with the help of second hand machinery that had previously been used to excavate the Suez Canal, and took until 1876 before it was completed. Until then, the former multiple channels of the great river took up an area of several hundred meters in width, and regular floods meant that the braided river had until then acted, not just as a massive barrier to the expansion of the city, but also as a constant threat to those areas, which were built close to its banks.

With its regulation, the Danube was effectively ‘tamed’, and it became possible to use the land on both sides of the new canalised channel, which was previously part of the river and its floodplain, for urban expansion. However by the point at which this expansion would have been necessary, the collapse of the Austro-Hungarian Empire following the First World War meant there was little need for further urban development, and the scattering of rural villages which had previously occupied the area, on the other side of the Danube and the large areas of newly reclaimed flat land continued to be used predominantly for agriculture.

In the nearly 100 years since, the new districts of Vienna across the Danube have indeed been the location of urban development leading to the expansion of the city, but this has tended to take the form of a confused patchwork of individual developments and architectural experiments on seemingly random parcels of land, and at a wide variety of scales. One of the largest areas to remain largely un-built until recently was Aspern Airfield. This is now the site of one of the largest green field development projects in Europe.

Aspern Airfield – Site of the new ‘Lake Town’

The Airfield opened originally in 1912 as one of the largest and most modern in Europe. It continued in both civil and military use throughout the 20th century until being gradually superseded by the growth of the current Vienna Airport at Schwechat, and it finally closed in 1977. In 1980 a massive new factory covering 20 hectares for producing car engines and gearboxes was erected by General Motors on the southern end of the site, but the majority of it still remained unused.

Fig. 3.48. Location of the 240 ha site for the Seestadt Aspern in Vienna’s 22nd District.
With the expected expansion of the city following the fall of the Iron Curtain at the end of 1989 and the resulting expectation regarding the growth of the city, a limited competition was held for the design of a new district for 10,000 people on what was a smaller part of the site of the current project, and without the assumption that it would be integrated into the city’s underground network. The competition was decided in 1993 in favour of the entry of the Vienna architect Rüdiger Lainer. He proposed an urban design master plan based on a seemingly almost mystical and barely comprehensible superimposition of multiple layers of different grids, axes and vistas, with the explanation that “the rules of classical composition no longer correspond to societal realities; forms have lost their capacity to mean”.

As if to confirm the inherent ‘unplanability’ urban developments in today’s complex world, that was the claimed justification for the approach adopted, the areas marked in green on the winning urban design master plan are described as ‘intermediate spaces’. It seems that whatever the inspired concept that led to this overall plan, the urban open space network still takes the form of good old ‘SLOAP’ – Space Left Over After Planning. Work continued for two years on developing the winning concept, but due to problems with financing the necessary infrastructure, the project was not pursued further, and indeed quietly forgotten by the city.

**The Second Aspern Master Plan Competition 2005**

The expansion of the European Union in 2004 to take in new member states, three of them immediately neighbouring Austria to the north and east, provided a convenient justification to hold a new competition for a new master plan. This time, the brief for which called for double the number of residents for the new urban district, and thereby a new concept with a higher density of development.

It was stressed in the competition brief that the size and location of the site within the newly expanded European Union and situated between the two European capitals of Vienna and Bratislava, demanded a solution which responded to its new ‘Central European’ context rather than just a simple urban expansion scheme. The brief spoke of a ‘city within the city’ approach being called for. This was perhaps the acceptance of a necessity given the fact that the site is bounded on all four sides by barriers to integration with the surrounding urban fabric and landscape.

Landscape and open space factors were nevertheless given appropriate prominence within the competition brief, with attention being drawn to the importance of preserving the two north-south green wedges bounding the site to the east and west.

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*Fig. 3.49. The site of the Seestadt Aspern with the former airfield runways and the General Motors factory to the bottom left of the picture.*
The winning competition entry, by Tovatt Architects and Planners of Stockholm, Sweden took the form of a self-contained, almost introverted composition organised concentrically around a central park with a lake. A ring road provides the main vehicle circulation route, and begs comparison with the historic ‘Ringstrasse’ in the centre of the city, while the grid-like perimeter block development is also reminiscent of the urban development in Vienna during the late 19th century. Its conservative layout and almost historical approach also contrasts radically with the previous competition winning entry of ten years previously. Apart from the circular and radial layout of the circulation system, the main identifying characteristic of the design is the central park with its lake. This has in turn provided the basis for ‘branding’ and marketing the new development.
Fig. 3.51. Revised version of the competition winning master plan for the new district.
Fig. 3.52. ‘Score’ for the Public Realm, by Gehl Architects, Copenhagen.
Part U 3.3 Reflections on the EUR area

This is the map built by the participant link the feeling of the place during the survey with the knowledge background of each ones. to build it the main problem was to give a function and a meaning to the different space. this operation is the one that create a lot of problems but is the only one capable to reconnect the urban spaces with the natural ones.

At the end of the work the group touch a lot of problems, but were not capable to propose them a solution because the poor knowledge of the real quality of them, so the decision was to propose a list of proposal capable to drive a management and a planning strategy for the next 20-30 years or more:

- Maintain the original plans
- Integrate local character with future development plans
- Develop ecological, social, economic sustainable equity
- Stitch the EUR to the rest of the city
- Make use of new linkage to enhance existing urban biodiversity
- Consolidate existing open spaces to optimize future development
- Particularly run the floodland for the social equity
- Use green infrastructure to enhance inclusiveness and urban democracy by public participation
- Introduce urban agriculture as social, ecological and structural element of sustainable development
- Evaluate EUR identity with the context of Roman identity

Part U 3.4: Research Issues and Potentials arising from EUR researching the subject: gaps in research and potential areas to focus on in the future

The main aim of this section was to find the “gaps in research” and to discuss the potential areas to focus on in the future. Below, one can find a survey of research topics related to metropolitan landscape.

OVERVIEW OF THE RESEARCH TOPICS THAT DEAL WITH METROPOLITAN LANDSCAPE

Research into the physical, social, aesthetic and conceptual potential of landscape for understanding, ordering and acting in metropolitan territories has gathered pace in recent decades. Studies addressing formal structural characteristics of urban landscapes in relation to social, economic and environmental aspects of large urban regions have been published by Rowe (1992), Sieverts (1997), Giro et al. (2003) and Tress et al. (2004). Oswalt and Baccini (2003), Bolling and Sieverts (2004) and Lampugnani and Noell (2007) investigate the metropolitan landscape with networks and edge conditions as points of departure. Wooley (2003) and Thompson and Traviou (2007) focus on the importance of open spaces to society, individuals and urban life. Steenbergen and Reh (2011) address formal aspects of the urban landscape and elaborate on relevant landscape architectural principles for spatial development. Waldheim et al. (2006), Czerniak and Hargreaves (2007) focus on landscape infrastructures as spatial armatures for urban development while Forman (2008) elaborates on the landscape ecological conditions for urban landscapes. To what extent landscape, in the sense of
a permanent underlying substructure, visual, physical and conceptual open space and as a conceptual and instrumental “vehicle” of nature, has a bearing on the resolution of metropolitan problems is the broader aim of these inquiries. Yet, even all these “schools of thought” have developed in research and praxis on landscape and its physical, social, aesthetic and conceptual potential in relation to metropolitan territories present state-of-the-art research still needs to tackle several relatively new topics: resilience and social natural systems and relation of landscape and ecosystem services.

The metropolis is an unstable, dynamic environment in which elements of the contemporary city re-array themselves in an urban-landscape system. Therefore it is important to explore emerging role of landscape in understanding, ordering and acting in metropolitan territories by answering these questions:

What are the processes and patterns particular to metropolitan spatial development, and how can planners and designers use landscape to understand order and act within it?

How can we comprehend the visual multiplicity of the metropolitan landscape? And how can we make this operational to landscape planning, design and management of metropolitan areas?

What is the potential of landscape and green spaces in structuring, organizing and programming metropolitan territories?

THE WAYS TO STUDY METROPOLITAN LANDSCAPES

The majority of industrial, residential, peri-urban and mixed-use urban tissues in metropolitan areas are characterized by varying densities and forms of built and un-built space which differ markedly from that of compact (historical) urban tissues and open countryside. Viewed from the perspective of traditional urban and landscape realms, these conditions challenge existing categorizations and qualifications and literally ‘disappear off the radar’ of the spatial disciplines. The limitations of existing approaches to classify and qualify metropolitan landscapes restrict our comprehension of the physical extent and character of the urban – and rural – realms in large urban regions (Tisma et al., 2013). Moreover, given that the number of citizens living in these areas, it is important to recognize and understand the character of these landscapes. This is an important basis for subsequent studies on their perception and valuing by metropolitan communities. Given the hybrid nature of metropolitan territories, the tools and methods to study rural and urban landscapes should be combined.

There are a number of different approaches to landscape typology and systems for landscape classification (Lipsky and Romportl, 2007). As a result, landscapes can be categorized according to a wide number of classification variables ranging from climatic, cultural or land use, but few of these are directly applicable to urban areas. Conversely, typologies of urban space generally stop at the administrative city border whereas administrative borders are becoming less and less crucial for urban processes and actors driving urban development, planning and other spatial policies. Looking specifically at urban and peri-urban landscape classifications, the literature shows very few classifications that treat urban and rural landscape together. The most important exceptions are the landscape typology and characterization for the federal state of Belgium (van Eetvelde and Antrop, 2009) and the European Urban Atlas (http://www.eea.europa.eu/data-and-maps/data/urban-atlas). In the following text we present a short overview of the methods for rural and urban landscape classifications.

Brief overview of existing landscape classification methods

Depending on which elements are used to define the distinct types, landscape classification methods can be broken down into three main categories (adapted from Berendsen, 2000, Groom, 2005, and Nijhuis and Reitsma, 2011):

Biophysical landscape classification:
this category addresses the internal coherence between landscape factors focussed on key-aspects of form and functioning of the natural landscape, such as: soil, geomorphology, climate, vegetation and land cover. The typologies are usually monothematic in nature. European examples include: Geomorphological regions of Europe (Embleton, 1984), Ecological regions in Europe (Painho and Augusto, 2001), the Soil atlas of Europe (Jones et al., 2005), Environmental zones of Europe (Metzger et al., 2005), CORINE land cover (Bosnard, 2000). National examples include: Soil-based landscape typology of the Netherlands (Edelman, 1950; Jongmans et al., 2013), Flora districts of the Netherlands (Van der Meijden, 1950; Jongmans et al., 2013), Flora districts of the Netherlands (Van der Meijden, 1996), Geological landscape typology of the Netherlands (TNO, 2009).

Anthropic landscape classification:
this category addresses the specific structure and development (genetic succession) of the landscape, focussed on the human influence on the landscape form, such as: agriculture, forestry, recreational uses, mining, and infrastructure.

The typologies usually combine factors like soil, climate, management system, historical aspects, land use dynamics. European examples include: the pan-European landscape typology by Meeus (1988, 1993, 1995), ENVIP-nature map on landscape types (JRC, 2002), European Landscape Classification-LANMAP2 (Mücher and Washer, 2007; Mücher et al., 2010), Map of European Leisurescapes (Wascher et al., 2008).

National examples include: Landscape typology of the Netherlands (Piket et al., 1987; Visscher 1972; Zonneveld...
British, French and Italian along with studies conducted in the Dutch context. (Pinzon Cortes, 2009)

**Function related classification:**
Here we are using two examples: “Urban Environments” (Stedelijke milieu) Ritsema van Eck et al. (2009) and European Urban Atlas (http://www.eea.europa.eu/data-and-maps/data/urban-atlas). For their classification of “Urban Environments” Ritsema van Eck, et al. used statistical data on land use, density of housing, jobs, shops, percentage of high rise buildings, office and shopping floor areas. They applied a grid of 250 x 250 meters, covering all of the land area of the Netherlands and grouped it into 18 urban environments (and one non-urban environment) using cluster analysis. This was done for 2000 and 2006 using the same categorization so that the changes could be analysed. Another example of the functional analyses is the European Urban Atlas (http://www.eea.europa.eu/data-and-maps/data/urban-atlas) which is providing pan-European comparable land use and land cover data for Large Urban Zones with more than 100,000 inhabitants and uses images from satellites to create reliable and comparable high-resolution maps of urban land. The Urban Atlas has a legend designed to capture urban land use, including low-density urban fabric, and expressing it in a level of continuity with a resolution that is 100 times higher than CORINE land cover. The Urban Atlas provides a far more accurate picture of urban sprawl in the fringe of urban zones. It provides relevant data for analysis related to transport, environment and land use.

**Brief overview of urban space classification methods**
This overview has no intention to offer an extensive listing of existing methods but to reflect on several examples that are relevant for the characterization of metropolitan landscapes. Methods for urban space classification depend on the aims of the study they are implemented in, so they will differ when the city is viewed from different disciplines. Taking into account the type of data used for analyses, techniques implemented, and the ways of representation, two main groups emerge: form-related and function-related classification. Form related classification looks at the patterns and forms of urban elements by studying their morphological character; the representation of these studies is expressed in drawings and maps. Function-related classifications start from land use, adding statistical data about densities of housing, jobs, inhabitants etc. These methods use computational techniques such as statistical calculations or clustering, and represent the results in the form of maps, which can be either grids or polygons.

**Form related classification:**
within the existing literature, there are two significant lines of studies on urban form. The first corresponds to the tradition of morphological studies, influential in the 1970s and 80s, and the second to more recent studies about the form of the landscape and the territory, which have been conducted since the 1990s (Pinzon Cortes, 2009). For both lines of studies, mapping and drawing are the most used techniques. Urban morphology deals with the knowledge of the logic of form, in this case, urban form. It is studied in several disciplines and involves looking at physical characteristics, structure, relations and transformations of things and their constituent elements. From the existing studies, the main three schools of typo-morphology can be distinguished:
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