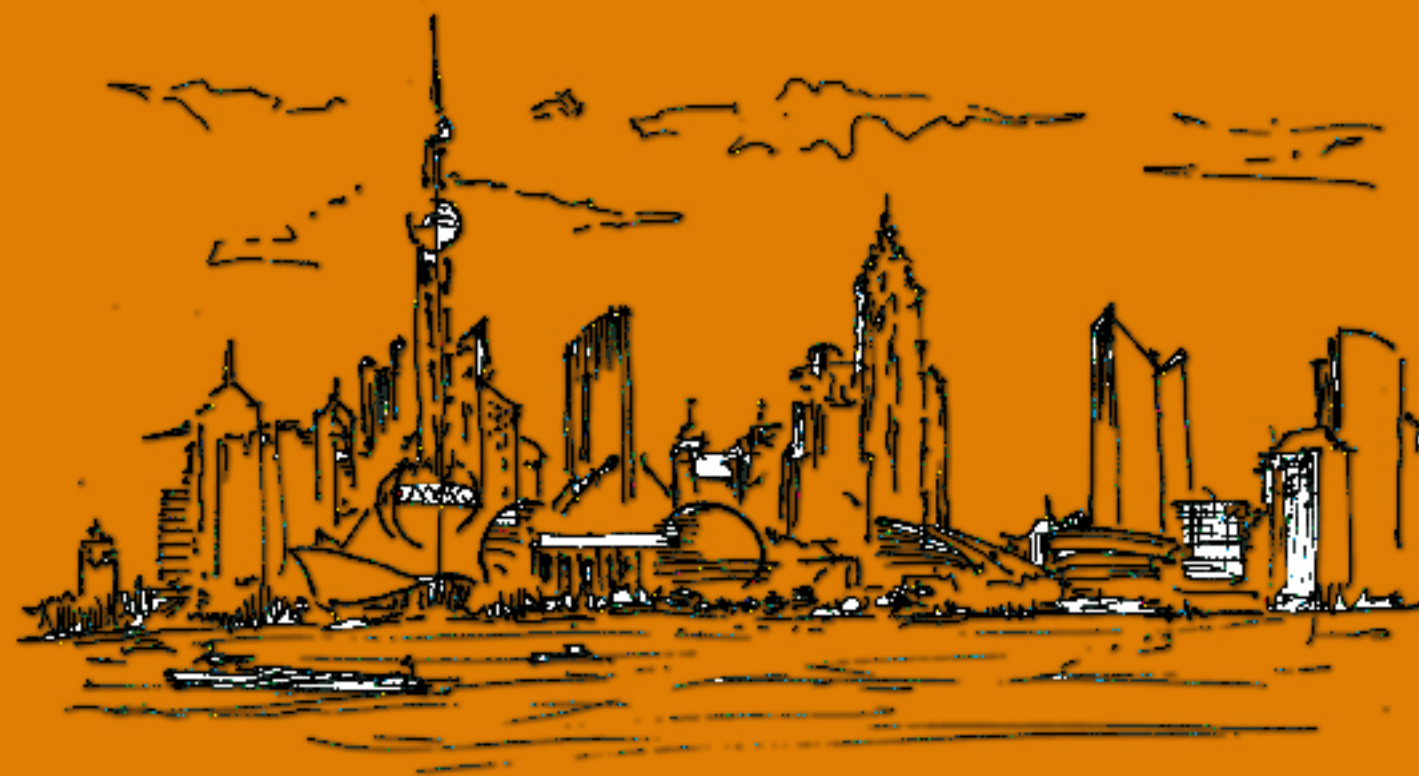


Second Conference  
"From Survey to the Project: Heritage & Historical Town Centres"  
Florence, 15-25 October 2007



From Survey to the Project: Heritage & Historical Town Centres

## From Survey to the Project: Heritage & Historical Town Centres

Information on urban regeneration

editing  
Stefano Bertocci  
Sandro Parrinello

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# From the Survey to the Project: Heritage & Historical Town Centres

*Editing*

Stefano Bertocci  
Sandro Parrinello



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Florence

## From the Survey to the Project: Heritage & Historical Town Centres. Information on urban regeneration

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- Regione Toscana
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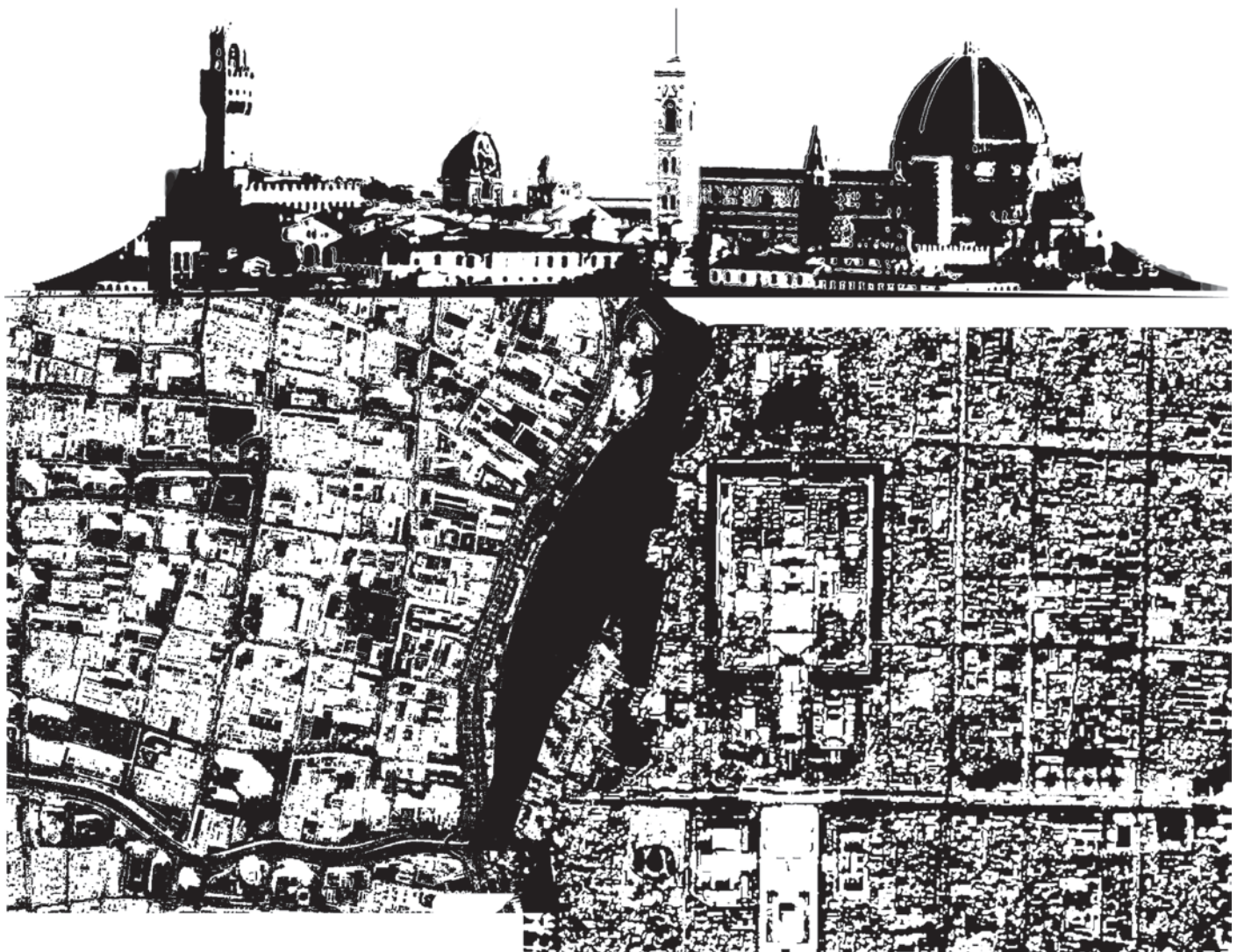




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## From the Survey to the Project: Heritage & Historical Town Centres

### Information on urban regeneration

"From Survey to Project: the Identity of Towns"<sup>1</sup> is a project that has been developed thanks to the commitment made by a group of Tuscan institutions and businesses. The foundations of this project have been a series of meetings and events aimed at promoting and developing cultural relationships between China and Italy, Tuscany in particular, which focussed on topical issues such as documentation, management, conservation and promotion of heritage and, more specifically, problems related to a more positive use of historic cities and their historical and artistic importance. Over the last two years, some teachers and researchers of the Faculty of Architecture of the University of Florence have developed relations with Chinese cultural and university institutions which have led to interest in this project. In particular, participants in the project presented a report at the "International Conference on Remote Sensing Archaeology" held in Beijing in 2004. At the conference, the foundations were laid for an ongoing scientific relationship that was further developed the following year in Italy with some teachers of the *Institute of Remote Sensing Application* of Beijing<sup>2</sup>.

The XI Forum UNESCO International Seminar on "University and Heritage", organized by the University of Florence in September 2006, saw the participation of representatives of some Chinese universities and the Museum of the Forbidden City of Beijing<sup>3</sup>. Representatives of various Chinese cultural institutions took part in "From Space to Place Remote Sensing in Archaeology", the international conference held at the C.N.R. (Italian National Research Centre) Rome headquarters in December 2006.

"From Survey to Project: the Identity of Towns" was initiated in September 2006 when it was included amongst the activities for "Italy in China", an event that took place at the Tsinghua University School of Architecture in Beijing and the Tongji University of Shanghai from 25 to 27 September 2006. Many professors and students from the Chinese universities, together with representatives of local authorities and cultural institutions were involved in this event. During the trip to China in September 2006, a cultural cooperation agreement with the Department of Architectural Design, the University of Florence and the Tsinghua University School of Architecture was signed.

Subsequently, the Regional Government of Tuscany volunteered, at Italian national level, to submit projects related to activities to be carried out in China and in other Asian countries such as India. The Regional Government has also promoted a discussion group with local institutions and companies that have cooperated with China in sectors related to the management of historic and urban centres, surveying and documentation, restoration and conservation of monuments and cultural heritage<sup>4</sup>.

These cultural initiatives have highlighted the need to create synergies and to put in touch two cultures which follow substantially different approaches. This should encourage a cultural as well as social and economic dialogue that is becoming increasingly necessary given the problems caused by heritage conservation.

The strategic objective of this project is to create an interest group that can act as a central point for the transfer of experiences and technologies in the field of research on documentation, management, conservation and promotion of heritage.

Following the first phase of experimentation, scientific and research activities should hopefully be supported by an institution offering specialised courses leading, for instance, to an international Master's Degree. This institution could be recognized by the Italian and Asian universities involved in this project. Teaching centres and practical workshops could also be developed and organized in Europe and in some Asian countries.

The need to put in touch different cultures is the main element of this project that can be seen as an operational opportunity to develop an initial round of contributions and studies on the issue of heritage.

During the second phase of the project, which is described in this volume, a Chinese delegation will visit Italy. The objective of the delegation is to exchange information and ideas with the operators who will take part in the seminar on operational methodologies, recent research developments and specific applications developed in Europe in the field of conservation of cultural heritage. Theories, practical applications, visits to restoration institutions and centres and to historical and artistic assets being restored in Tuscany will all be part of this international seminar.

The seminar activities are divided into themes which relate to those sectors where, from some time, specific skills are generating internationally recognized know how. Within the confines of the duration of the seminar, the programme that has been prepared aims at presenting an inter-disciplinary view of the issues that will be dealt with. Furthermore, for each section, speeches, communications and guided tours will be organized. In this way, the theoretical elements

<sup>1</sup> "From Survey to Project: the Identity of Towns" is a project that was launched in 2006 thanks to an idea developed by Stefano Bertocci, Professor of Architectural Surveying within the Department of Architectural Design of the University of Florence and Sandro Parrinello Research Fellow at the same Department respectively, with the support of Marco Bini, Deputy Dean of the Faculty of Architecture, Marcello Balzani, Director of D.I.A.P.R.E.M. (Departmental Centre for the Development of Integrated Automatic Procedures for the Restoration of Monuments) of the Department of Architecture of the University of Ferrara and Francesco Maglioccola, of the Università Parthenope of Naples, have also contributed to this project. The project has been managed and financed by Toscana Promozione, an agency of the Regional Government of Tuscany, and the Italian Trade Commission (I.C.E.). It has been promoted by the Regional Government of Tuscany, the Department of Architectural Design of the Faculty of Architecture of the University of Florence, and the Tuscan companies operating in restoration belonging to Associazione Prorestauro. The catalogue, edited by S. Bertocci and S. Parrinello, and titled "From Survey to Project: the Identity of Towns", was published by Edifir (Florence) in 2006.

<sup>2</sup> One of these teachers was Professor Guo.

<sup>3</sup> The Deputy Director of the Museum of the Forbidden City of Beijing, Mrs. Zhou Su Quin.

<sup>4</sup> The Department of Architectural Design, the Department of Restoration of the University of Florence, the *Opificio delle Pietre Dure* of Florence, the *Soprintendenza per i Beni Architettonici ed Ambientali* (Agency for Architectural and Environmental Assets) of the provinces of Florence, Prato and Pistoia, *Toscana Promozione*, *Associazione Prorestauro* (through some member companies based in Tuscany and operating in the field of restoration) took part in this discussion group.

of the second seminar will be linked to practical on-site knowledge to be gained through visits to laboratories and monuments being restored. Possible repercussions at social, economic and management level will also be discussed during meetings with administrators, companies and organisations managing parks and museums.

- *Discussion on Cities: Cities as Evolving Complex Systems*

This section contains some contributions dealing with the important theme of understanding architecture and, in particular, monumental architecture which is linked to its own environmental context. The vision of monuments and cultural heritage as the sum total of a structured system finds its specific contents in the city.

The problem of cities, as continuously developing organisms, and historic centres, that are being restored and enhanced, is dealt with from a management point of view. In fact, management of cities and historic centres has been enhanced thanks to the introduction of IT systems and their applications to management and planning programmes. This section also deals with issues related to urban outskirts that are seen as planned expansion processes providing for the integration of new architectures with the historic town and its monuments.

- *Cultural Assets: Conservation Strategies*

Over the last few years, there has been a development of awareness around prevention rather than taking late actions to restore or conserve our heritage. This means that institutions and social organisations assets are being placed in museums or treated as museums in order to safeguard specific groups of assets or an environment that might otherwise lose its value and significance. Relationships and facilities are created so that they can transform a group of places, monuments or museums into cultural aggregation points which, in turn, can transform the qualities of an environment or a particular area by increasing their chances of survival as well as promoting their social and economic development.

- *Digital Technologies and Applications for Documentation*

The evolution of technologies used to map the geometry of assets, the qualities of their materials, their character and all those aspects characterizing cultural assets in general has seen renewed interest in digital applications for documentation. Highly reliable theme-based printouts, digital models, 3D data banks have become fundamental archives for the future management of cultural assets and are useful for safeguarding, maintaining and conserving assets. They are also indispensable for restoration or reproduction purposes.

- *Conservation Methodologies*

This section contains some significant considerations on the principles that are at the basis of an appropriate approach to conservation of assets of historical and artistic value. These reflections have been developed thanks to past experiences, widespread knowledge of mistakes made over time in this field and new knowledge acquired by using available technologies. To this end, starting from general considerations on the methodological and operational procedures, some significant Italian and Chinese experiences of the last few years under the guidance of and in cooperation with the Agencies responsible for safeguarding our heritage are outlined.

- *Contributions*

This section shows some work recently carried out by technicians and Tuscan companies operating in the fields of conservation and restoration on some monuments in Florence, Pisa, Prato and Pistoia. Visits to these monuments are planned during the seminar.

*Stefano Bertocci*



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司提凡·贝多奇

“从遥想到构建，古城镇意象”<sup>1</sup>。这一计划得以实施要归功于托斯卡纳地区不同机构和企业的紧密合作，通过多次会晤，旨在发展中意两国间，尤其是托斯卡纳大区与中国之间的文化邦交，双方聚焦于一个迫切关注的主题，即文化遗产的史料搜集，管理，保存与开发，着重于历史城镇的修复及其艺术价值的再现。

近两年来，佛罗伦萨大学考古系的一些教授和研究人员与中国认同此项计划的一些文化机构及大学确立了合作关系。特别指出，计划的相关人员还带着一份报告出席了2004年在北京举办的“国际遥感考古会议”，会议期间奠定了长久科学合作关系的基础，这在下一年北京遥感应用技术学院<sup>2</sup>一些教授的多次来意访问中得到了证实。2006年9月由佛罗伦萨大学组办的第九届联合国教科文组织大学与文化遗产国际研讨会期间，中国部分大学以及北京故宫博物院的代表也来到了佛罗伦萨<sup>3</sup>；此外，中国不同的文化机构代表还参加了2006年12月在罗马C.N.R.所在地举办的“从空间到实地遥感考古”国际会议。

由托斯卡纳大区推动的，“从遥想到构建，古城镇意象”计划以及相同主题的活动开端于2006年9月，当时被列入“意大利在中国”系列活动之一，2006年9月25至27日期间分别在北京清华大学建筑系和上海同济大学举办，牵动了主办方大学的教授与学生，地方团体与文化机构的代表亦纷至沓来。此外，2006年9月中国之行期间，佛罗伦萨大学建筑设计系与清华大学建筑学院确定了文化合作关系。

继而，托斯卡纳大区在意大利全国范围内自行提名，展示与在中国的活动有关的计划，而后，将在亚洲其他国家，例如印度。并为地方机构与企业的讨论提供了平台，这组群体都有过同中国就相关主题进行合作的共同经验，比如历史中心与城镇的管理，文化遗产及文物的测定与史料搜集，修复与保存<sup>4</sup>。

这一系列的文化创举给予了机会以验证建立协作和文化交流的必要性，不同的视角相互交汇，推动了文化间的对话，虽然有关保护文化遗产的一系列经济问题日益突出，社会经济对话也显得十分重要。

此项计划的战略性目标为筹备一部分基金作为储备金，用于资助在文化遗产的史料搜集、管理、保存与开发这一研究领域中的经验与技术传递。

我们有预见：在初始阶段的试验后，可以在科学研究活动之翼安插一个教学与专员培训机构（有赞助的），例如，国际硕士课程，这要寻求意大利以及亚洲相关大学间的共识，在欧洲或亚洲的一些国家筹措教学地点。

不同文化间交流的必要酝酿了此项计划的初衷，预示着为文化遗产的研究与初步基金的筹备提供了一个新的机会。

计划的第二阶段，内容都收录在这本册子中，预设了中国代表团来意大利的访问，主要的目的就在于让专员进行信息沟通与对比（他们曾一起出席过研讨会），切磋工作方式，了解欧洲同行关于文化遗产保护的研究与应用新发展。国际研讨将分为理论交流，实际应用，参观托斯卡纳地区的现场、研究院和修复实验室。

安排的活动根据不同部门分成几大块主题，这些部门正在研发一项国际范围内认可的新技术。我们尝试制定了一份计划，尽可能地根据此次研讨所持续的时间，以期就论题进行一次跨学科的交流；此外，关于各个单项，我们安排了发言、交谈和参观，旨在将工作理论联系到现场与实验室的实践认识中，并且通过与管理层、企业、公园及博物馆经营团体的会晤沟通避免社会经济与管理可能带来的问题。

- 城市试验室 城市是一座发展中的综合体系

出现了一些协助，都是针对理解建筑，尤其是与周边环境协调的文物性建筑这一重要主题的；文物与文化遗产综合起来构成一个城市的独特魅力。

城市，作为一个不断发展中的体系，历史中心，被修复与重生，这一主题亦可被放到管理学层面来探讨，通过引进地理信息系统和应用管理与设计程序，我们找到了一些新的解决方案。鉴于城市郊区是拓宽地域的一步进程，还另辟了相关论题，讨论新建筑与历史性城镇及其文物的协调。

- 文化财产体系：保存战略

近年来浮现出一种预防意识，与其日后对需要保护的文化财产与遗产进行保存与修复，人们意识到应当通过社会或机构组织，对特别的一些物件或环境进行博物管理，以防丢失其历史意义与价值。因此计划了一些方案，将景点、文物或博物馆这一整体转化成文化聚焦点，这能够重塑一个环境或地点本身的价值，使得所保护的文物得以存留的可能性被提高，也利于当地社会与经济的发展。

- 新技术与数码被应用于史料搜集

人工几何测定技术的发展，激发了人们应用数码技术于史料搜集的兴趣。高度可靠的测量数据，数码模型，三维数据库的构建，如今已成为未来文化遗产管理的基础档案，配以相应的保护、维护、保存与必要的修复和复制措施。

- 保存措施的方法论

一些意义深刻的思考得以进行，基于保存有历史文艺价值的手工艺品的心愿。这一思想在过去的经验遗传中得以成熟，同时也由于对过去在这一领域所犯下的错误的广泛认识，以及通过运用今日所具备的技术条件所获得的成果。为此目的，出于对方法与操作的肯定，我们推荐近年来在意大利和在中国的几起成功经验，这些都诞生于正确的导向以及与保护团体的协作。

- 友情协助

最后，这次研讨活动还将展现给各位托斯卡纳地区技术员与企业功近期完成的一些维护及修复工程，地点为佛罗伦萨、比萨、普拉多和皮斯夸亚。

<sup>1</sup> “从遥想到构建，古城镇意象”这一计划诞生于2006年，起源于司提凡·贝多奇与桑德罗·帕里奈罗教授的一个主意，他们分别是佛罗伦萨大学建筑设计系的建筑测量教授和同一个系的指定研究员，与马可·比尼一起任佛罗伦萨大学建筑学院的副院长。此项计划还收到来自以下各方的帮助：马塞罗·巴尔扎尼，D.I.A.P.R.E.M.中心的负责人，专门负责费拉拉大学建筑学院文物修复全自动化进程这一项目；弗朗西斯科·马利奥克拉，那波利Parthenope大学的教授。这项计划由托斯卡纳大区筹办委员会赞助，大区内许多企业以及外贸局的赞助，由托斯卡纳大区和佛罗伦萨大学建筑学院建筑设计系联合推动，还有来自修复组织，托斯卡纳大区一些文物修复企业的帮助。由司提凡·贝多奇与桑德罗·帕里奈罗教授共同撰写的目录已在佛罗伦萨出版，2006年，Edifir出版社。

<sup>2</sup> 在北京遥感应用技术学院的教授一行中有Guo Huadong教授

<sup>3</sup> 北京故宫博物院的副院长是Zhou Su Quin女博士

<sup>4</sup> 参加方有佛罗伦萨大学修复系与建筑设计系佛罗伦萨硬石厂，佛罗伦萨、普拉多和皮斯夸亚省的教育部附属建筑与环境财产局，托斯卡纳大区筹办委员会，修复组织以及托斯卡纳大区一些文物修复企业。



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# Investigation of the historic city: how to define a working programme

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«Will the city disappear or will the whole planet turn into a vast urban hive? Can the needs and desires that have impelled men to live in cities recover, at a still higher level, all that Jerusalem, Athens and Florence once seemed to promise? Is there still a living choice between Necropolis and Utopia?»<sup>1</sup>



Fig. 1. View of Aleppo (Siria) from the Citadel

Today's techniques of investigation and documentation of the historic city, and of the Heritage in general, have benefited from the contribution of those European writers who, last century, tried to define the complexity of this phenomenon. Reference to the classics has always been very useful, especially for those who want to take a historical and critical approach to the study of architecture, of the city and its area. This cultural sub-layer is undoubtedly extremely useful for the analysis of the problems that are generally due to the impact produced by changes and by the adaptation to modern life, as well as to the new social and economic situation.

The notion of multilayered place is used in archaeological sciences to describe a settlement where different traces of human activities have been found at different times; from the most typical ones, such as geographically stable dwelling places, to occasional ones, determined by seasonal, hunting or production needs. This notion is particularly suitable to define the city, which is the typical expression of human civilisation, especially in Europe and Asia, and particularly applies to the area of the city that is usually defined as the historic centre, which is usually the core and the origin of the modern city, a preferred place where the functions that characterise every urban settlement took and still take place, with changes that are not always linear. To really understand the historic city, one must search its origins, its specific historical documentation, and understand its historical events.

The multilayered city is the product of important as well

as minor events that left in their wake a concentration of buildings, a "shell" that has contained people's lives and has developed through its history. The stratigraphic reading of walls, a technique which is used both in archaeology and in conservation, considers this "shell" as a text, a very significant document for those who are able to analyse its forms and types, in order to reconstruct its specific events.

According to Aldo Rossi, the city is the locus of collective memory: «Its central role in the economic, social and cultural development can only be understood by linking it with individual and collective representation and perception processes. If it's true that the historically-consolidated system of central structures is the reference point for social practices, which is continuously relived and re-processed by collective imagination and memory, it is also true that these very social practices, as well as the collective memory that guides them, affect the transformation process of the central structures and determine their role in the arrangement of the territory»<sup>2</sup>.

Buildings live and talk just like people who inhabit them, and past events, decisions and values stay alive in urban physical structures, and still exert their specific influence.

One of the "classics" that are useful to our study is Lewis Mumford's *The city in history*, published in 1961 and translated in Italian for the first time in 1967. This work, which contains lectures and research by the author, has been for decades one of the benchmarks of urbanistic theory and, at the same time, one of the most complex and fascinating pieces of research that was the result of the historiography of that time.

In the post World War II period, in the middle of Europe's economic and urban development, Mumford tried to answer a number of important questions: «Will the city disappear or will the whole planet turn into a vast urban hive? Can the needs and desires that have impelled men to live in cities recover, at a still higher level, all that Jerusalem, Athens and Florence once



Fig. 2. Aleppo's Citadel from the Bazar's roofs





Fig. 3. View of an area of Tripoli (Lebanon) from the Citadel

seemed to promise? Is there still a living choice between Necropolis and Utopia?». He tried to find an answer to these questions through an unparalleled erudition, and using notions of sociology, historiography, town planning, philosophy, history of art and architecture, taking an unequalled and evocative journey through the history of human habits and coexistence in those complex structures that we call cities.

«The development of symbolic methods of storage immensely increased the capacity of the city role as a container; it not merely held together a larger body

of people than any other kind of community, but it maintained and transmitted a larger portion of their lives than individual human memories could transmit by word of mouth.

This condensation and storage, for the purpose of enlarging the boundaries of the community in time and space, is one of the singular functions performed by the city; and the degree to which it is performed partly establishes the rank and value of the city»<sup>3</sup>.

One of the most interesting authors who, in my opinion, contributed to developing ways to understand an area is Christian Norberg Schulz. In his *Genius Loci*<sup>4</sup>, which should be read in the light of the modern theories about the perception of reality, he points at two different categories that contribute to defining the uniqueness and the meaning of a place: space and character. «While "space" indicates the three-dimension organisation of the elements that make up the place, "character" denotes "the general atmosphere" which is the most distinctive feature of any place. Rather than making a distinction between space and character, one can use an all-embracing notion, such as that of "living space". (...) Space is definitely not a new term in the theory of architecture, but it can have several meanings. According to the current literature, the term space can have two meanings: space as three-dimension geometry, and space as perception field<sup>5</sup>. Neither of them is exhaustive, because they are abstracted from



Fig. 4. View of Seville (Spain) from the Giralda Tower





Fig. 5. View from Montparnasse Skyscraper (Paris)

the three-dimension intuition of daily experience, which we could call "concrete space". Concrete human actions are not carried out in an even space, but in a space full of qualitative differences»<sup>6</sup>.

Therefore, the structure of a place is made up of all the environmental features that make up space and character.

To understand the *genius* of an urban place, and, in particular, of a historic centre, one can study both the buildings, which, either individually or collectively make up the urban fabric, and the so called "empty" spaces that make up the buildings and the urban fabric, and those spaces that are "full" of spatial meaning and "character", such as streets, squares, and other open spaces, like parks or gardens, overlooked by the "full" spaces of the cities' architecture.

Therefore, for survey and documentation purposes, in addition to individual buildings, one must also consider the features of mutual locations, of the qualities that are "placed side by side" and make up a front or a set of urban fronts. The external-internal relation, which is the main aspect of concrete space, implies extension and closure. Every closure is defined by a limit, a boundary, in general, and, more specifically, by walls, by more or less continuous enclosures that make up the spatial structure of urban empty spaces and characterise their extension, direction and rhythm, whether they are continuous or not.

The character is defined by the material and formal composition of the place. The boundaries of the place are also important and depend on its formal structure which, in turn, is linked to the construction techniques. «When considering a building from this point of view, one will have to think of how it rests on the ground, and how it raises towards the sky, paying particular attention to side boundaries or walls which, in turn, contribute to defining the character of the urban environment»<sup>7</sup>.

The survey and documentation, followed by the processing of metric and qualitative data, and other information that can help understand the features of the place, must define the qualities of the urban image of a specific context. Mumford and Norberg Schulz's studies, if applied to the urban fabric of a historic centre, could be beneficial for the analysis of development procedures and the enhancement of problematic areas.

The historic centres are often affected by poor health and safety conditions as well as deterioration. They are of great historical, artistic, economic, commercial and administrative interest and must be seen as the heart of a wider and more structured urban context in the city's complex system.



Fig. 6. View from Montparnasse Skyscraper (Paris)



The current debate is focussed on operational and implementation aspects such as the conservation of cultural architectural and archaeological heritage, restoration, conservation and management of the historic city and its area, the assessment of the impact of new interventions on the area and on the environment in general <sup>8</sup>.

The extraordinary growth of new technologies that have been developed over the last few years poses a number of challenges that require a rethinking of the cultural context of town planning, which is necessarily linked to the study of pre-existing elements, to the establishment of a *map of values* based on the fundamental activities of survey and documentation of the environment, the architecture, the city and the area where planning takes place.

One of the main problems for those who are in charge of preparing the *map of values* of a specific site is the "management of complexity". This is one of the main themes that are driven by technological development and the structural increase of produced data, which is typical of modern civilisation.

Therefore, there is a strong need to organise the very structures of "knowledge" to prevent the quality of the data from making knowledge pointless; the heart of the matter is the selection of data, the structuring of relations in such a way that, with the use of available technologies, knowledge and meaning are found. Therefore, technology becomes a true extension of human intelligence, which is capable of producing real knowledge. Available tools include specific technologies and applications, such as G.I.S. systems or various applications for georeferenced databases, which are produced by the flourishing cybernetic market, and



Fig. 7. The highway over the port of Genoa (Italy)

which enable us to organise management and control systems, in order to plan conservation activities or reorganise "complex systems" such as modern multilayered built-up areas <sup>9</sup>.

These careful analyses may contribute to defining more stringent working methods in order to carry out surveys. These, if implemented, could contribute in a decisive way to preparing specific plans aimed at integrating the so-called historic centre in the city's vital structure.

The *rules* to follow in the project can be found in the *text*, in the analysis of the urban fabric, of its meaning, and in the assessment of social and economic aspects. To plan means to know, which is particularly true in the case of interventions carried out in delicate contexts, such as those aimed at the redevelopment of ancient



Fig. 8. Montepulciano historical town centre (Italy)



urban areas. The intention of the plan and of the project should not be to carry out a mimetic intervention but to provide answers that are consistent with the context, with the new needs for a sustainable social and economic development, without which these places are bound to be forgotten and to lose their meaning. The project can then be based on the studied environment with the result that any change is a logic consequence of the growing process, keeping in mind that an enhancement intervention also means to add a new element to the long and complex series of interventions that have generated the urban structure. The strong sense of unity that can be perceived in many historic centres also derives from the ability to reproduce the same level of quality and from man's need to identify with his environment. All the information provided in the census will give an idea of the possibility to carry out different interventions in every part of the city. Particular attention should therefore be paid to the enhancement of the environmental quality, even when planning works for one single building, also taking into account the interests of the community in a specific historical period. Finally, interventions will be determined on the basis of the buildings' classification, which takes into account the higher or lower architectural or environmental value which is established by the *map of values*.

**Notes**

- <sup>1</sup> L. MUMFORD, *La città nella storia. Dal santuario alla polis*. Vol. I, 3<sup>a</sup> edizione Bompiani, Roma, 2002.
- <sup>2</sup> Cfr. R. GAMBINO, *Ambiguità feconda del paesaggio*, in M. QUAINI (a cura), *Il paesaggio tra attualità e finzione*, Cacucci Editore, Bari, 1994, p. 137.
- <sup>3</sup> L. MUMFORD, *La città nella storia. Dal santuario alla polis*. Vol. I, 3<sup>a</sup> edizione Bompiani, Roma, 2002.
- <sup>4</sup> C. NORBERG-SCHULZ, *Genius Loci. Paesaggio Ambiente Architettura*, Electa, Milano, 2003, sesta edizione.
- <sup>5</sup> C. NORBERG-SCHULZ, *Esistenza, spazio e architettura*, ed. it. Roma, ed. Officina, 1975, pp. 13 seg.
- <sup>6</sup> C. NORBERG-SCHULZ, *Genius Loci*, op. cit., 2003, p.12.
- <sup>7</sup> C. NORBERG-SCHULZ, *Genius Loci*, op. cit., 2003, p. 11.
- <sup>8</sup> S. BERTOCCI-S. PARRINELLO, *Rilievo e Piano di Gestione per il Centro storico di Montepulciano*, in P. CLINI-N. LANCONI-R. QUATTRINI (eds.), atti del convegno *EARCOM 07Sistemi Informativi per l'Architettura*, Alinea editore, Firenze, 2007 pp. 108-113.
- <sup>9</sup> See "la Variante Urbanistica del Centro Storico del Comune di Montepulciano (SI)" (the urbanistic model of the historic centre of Montepulciano), by Arch. M. Bertone, for which the Dipartimento di Progettazione dell'Architettura dell'Università degli Studi di Firenze (Department of Planning and Architecture of the University of Florence) acted as consultants, directed by Prof. S. Bertocci, co-ordinated by Dott. Arch. Sandro Parrinello, with the collaboration of Arch. Giuseppe Russo, Ing. Lorenzo Bianchini, Andrea Pagano, Caterina Giovannoni, Filippo Sani, Vanna Visani; Prof. Grazia Tucci acted as consultant for cartography.



Fig. 9. Thematic maps from the historical town centre Plan of Montepulciano (Italy)



Fig. 10. Map of architectural and enviromental value of each building from the Plan of Montepulciano (Italy)



# 古城的调查与研究：工作方案的拟定

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“...事实上，我们生存的环境所具有的一切特征都是人类的巨作，从这种意义上说，由于物质的形态和运动秩序皆源于思想，思想在其自身思想的引导下与人类活动相结合。相反，任何事物的形态和运动秩序都在自然和人为环境中体现出来，通过感性认识和总体印象在我们中间渗透开来，他在人们的记忆中留下的痕迹构成了近代思想的基础。”

佟·博翰

城市是我们这个社会最综合，最详尽的体现。城市在其自身的元素中蕴藏了整个文化的历史，它是文化整体的衍生，位于由单个感知水平构成的各个方面中，人类的认识过程可概括为：当人类决定在其领土上居住的那一刻开始将意识付诸实践。

当我们将不同的城市相比较便会发现一些重要的元素，甚至是看不见摸不到的，譬如历史事件的成果把文化活动和不同的社会经济现实联系起来，某些元素把一些较新的和复杂的活动留在我们的生活中，在大多数情况下，人们已经忘记了它的起源，或者从更具象征意义方面来说“正是由于城市的建筑，制度结构，依旧持久而且具有代表性的文化艺术形式，城市被人们所记住。城市将过去，现在和将来相结合。每一种文明，在什么时候，都会提出一种不同的城市定义，为了了解它，为了设想它，为了体验它，人们可以感受到建筑的每一条规则，对于历史及当代城市的维护和利用人们很难找到分析的标准和方法。

城市是由它的空间的活力，建筑特点和一些限制环境的承载力及定义某地的准确形象的“次要”因素所定义的一个机构。

谈到城市环境，存在一种将城市分类的趋势，比如东方城市，欧洲城市，新世界的殖民城市等。大部分形容词来自从自然和空间方面确定城市增长的城市规划标准的研究，还有一些来自次要元素的特征，这些次要元素位于城市领域内部并与环境相结合，有时具有典型的重要性，有时尽管缺乏独特性，但却属于具有典型形态和重要意义的景观。

“建筑师将空间划分，分配，布置，在空间内以看似对立的两种顺序，即生物的和精神的顺序，移动生物。在这种情况下，建筑师的每个动作都构成一次选择，每个建议都体现出所引起的压力的价值。城市尝试着提出这种选择，而不仅仅是一个偶然的容器。如果我们从这个角度来想一下建筑，我们便会更好的理解它的角色，即表达评价的顺序，是一个价值体系。通过对环境的定义，在这种环境中，事物和地方变成了作用于价值领域的相互关系的要素。于是，环境变成了人类行为的进化压力的形式。

然而城市依然存留着一些模糊的象征，符号和不太明确的对象。我们只有从建筑师，艺术家，设计师那里找到一些方向。得出的结论是城市就像一项人类从未执行过的疯狂的发明，一项在他的创造物中占优势的发明。

进行一项有关居民住宅区的特殊研究的困难之处在于要将居民住宅区和在该地域内运行的各种关系的链环结合在一起。这种链环应该被分开，应该构成调查的结构，同时，各种关系是研究的对象。

关系是具有代表性的，就像媒介一样通过一一对应的信息流将两种元素结合起来，这些信息需要适当的工具和描述者为具有标准性的文学服务，因此，城市空间中充斥着许多很具代表性的关系，并通过星行的形式将每一点和与其相联系的之前的点结合在一起。

尽管意识和想象受到观察者的位置，方向，和其他作用于组织机构的功能的限制，导致它们限制了注意力，将思想意识集中在特殊事件的记载上。连接城市链环的关系的总体通过意识，颜色，声音，气味和包围着它的嘈杂还是不断地被居民所感知。这些事件既有积极的，也有消极的。积极的事件有特定的期限和自

由间断的活动，消极的事件没有特定的期限，活动持续不断，为此，对于确切的元素人们无法感知到其特定的关系，我们就像环境一样承载着这一切。

环境通过逐渐的过渡相交叉，相混合，逐渐消散。通常情况下，对于这种综合的结构，居民甚至会自动完成建立在具有传播能力的环境元素之上的总结，以及两种新视点的比较，即现实的和看似感知过程的基本进程的机构模式的观点。在进行地区的形象和自然分析的研究的情况下，为了创造支持研究的特殊方向，可以使整个研究偏向概括二维和三维为基本形式的多维空间的主体文学<sup>1</sup>。

在某种情况下，它们变成了能够便于辨别方向和增加模式能力的代表的有效系统。“数字模式的基本特征不是现实的伪装或表面征兆或是结构和功能的伪装方式，当力量像具有行为，性能，地质，几何及感知同类的实际典型一样行使职能时，有能力进行模拟和分析计划及行为，以更加优越的方式允许具体化及基本数据的相似技术。”<sup>2</sup>

“典型的放置允许譬如建筑及景观这种具有诠释内在空间系统的结构的建设，以三维的描述方式。早在第二代资料学诞生之前，阿波翰·莫勒斯就像我们清楚地解释了这一切。为此，以3D的形式还原建筑不仅帮助了他们的形象化，相关的信息的保存，而且让他们变得易于组织和还原”<sup>3</sup>。

于是，照片和图像就成了直接的阅读工具，通过他们人们可以发掘描述这些关系的对象及可以进行从静态美学形象化跳到动态形象化的三维模型。因此，虚拟的图像可以增加我们对特定环境的学习，因为他们能够重新创造一些信息和受到人类自然居所

的束缚而不可感知的关系。

它在人们的认识中增加了反馈的动态，在有限的时间里增加了可感知的信息的数量并扩大了一是空间。

玛伍历茨奥·福德在一次研讨会上对存在于精神和思想领域的空间方向的关系作了一个在我认为十分深刻的比较，精神和思想领域，现实和虚拟领域的空间方向形成了一个扩大人类潜在方向的链条，改变了存在意识的潜在行为。这种顺序，这种人类头脑中的形象的演变用一种特别的工具找到了它概念上的极为详尽的形势：GIS系统，或者是与代表性的方向系统和同一个绘画方向系统相比，连接详细信息的系统。这种实际的传统是一种现象，它已经通过很长的时间在推翻了许多大众普遍接受的现实障碍的基础上找到了其广泛而认可的应用。实际的地区的建设装载了一种反映总体政策的机制，这些政策长期指导者近来发生的概念活动和建筑活动。就像是思想和计划的果实，城市自身制定着自己的思想，创造了新的环境并组成自身的关系。

于是，诞生了许多新的城市类型，其中有一种类似于麦姆非斯理论提出的“不间断城市”和围绕在墙壁和荒漠间的游牧城市。这些观点说明了在社会，思想，城市自然结构中进行深刻变革的必要性，同时也预示了一些人类梦想的沟通方式成为现实。大都市和我们居住的现代的城市聚合体在郊区中舒展开来，通过其他的城市中心相连接，没有连续性的限制，它们将链环变成网络，将现实的城市变成了信息城市。

事实上，除了那些有人居住的城市或是领土中易读到的城市，存在其他的“不间断城市”，这些城市不提供清晰明显的记号以用来宣称他们的存在，而是没有任何限制的伸展开来，属于别的范畴，就像是在网络中发展的世界一样。所有的社会职能以如此的频率和强度来执行以用来改变我们这个空间内的生物的习惯和必要性，并通过大众来影响逻辑的生活方式。网络没有一个固定的时刻表，似乎他正在与现代城市的真正的敌人时间进行这一场技术战斗。

天才人类的这项伟大杰作重新提出了城市自身的定义，即城市幻影，它通过a维空间不断的延伸和移动到无法触及的地方和一无所知的人类。于是，当代城市的颜色，形状和特征与现实



相联系,并被信息风暴所颠覆。过度的不断增加的信息有了在理解中畅游和迷失方向的效应的结果,在这种情况下,它可以通过地域整体的价值丧失的直接结果引起同一组成部分的捏造。

尽管我不清楚此刻有道路在我的眼前穿过,或许通过了我。用载满了事情,金钱,情书和图像的卡车正在通过我,在几秒钟之内从代托特到巴姆拜,或者是从斯拜里亚的荒僻的村庄到某些大都市。

这个地区的形象不是和现实世界的元素相联系的,但是由于这种无限蔓延的能力,它将人们引入另外一个世界,理想的世界就是其自身的创造者能够接近自然,接近上帝。谁居住在这个城市现在已经可以在这里睡觉,有些甚至患了这个世界的病症,有些人把所有自己的活动都转移到了这里,甚至很难回头,有的人生了病在没有信息工具的援助下不能想象现实。或许这些影响计划和电脑的病毒能够逃离他们的世界,在这个世界里他们被放逐,现在已某种方式尝试停留在那里。

由于这种疾病许多建筑师陷入了严重的危机,使得我们这个城市越来越多的新建筑感到了无力组成的痛苦,而现在已经能够朝着信息城市“不规则”的规则前进。

一个人通过它所创造的事物来进行创造似乎不会创造的如此复杂,就像是他自己创造他一样。

电影展现了这个地区的许多形象,在这里放电漫游无止境,最具描述性的形象便是空间,宇宙被称作是维度,但是具有许多高速公路的无人居住的大都市就像是一个电路的传播者,马特里斯的电影的画面为我们展现了只有在电脑里才存在的我们所熟悉的世界。

在这种连接的混乱中,有些描述形式偏向特殊的加快,放慢,或是突然的空间扩大,所有一切都是为了描述景观,移动,以及以三维的环境的直接意识所产生的活力的存在物和关系,从标准的报告中摆脱了惯有的视野。一瞬间,这些视野在路途找到了自己的空间,生命在这样的地方变得异常活跃。

千百年来马路连接着不同的地区,增加了环境的意识联系,就像是不曾间断的建筑,就像是一片空地,在那里城市空间不断扩充。每一天马路就像建筑元素一样入侵这个世界,包围这个世界。我们所有人都担任了马路这个角色,当我们出门的时候,它们会把我们带回家。许多地区都有作为度量单位的马路,它应该被认为是人类的度量工具,譬如四轮马车或是现代的小汽车,城市社会经济的发展使得马路不断的膨胀以便来经营庞大的交通,但却很少获得成功,改变了的度量单位会改变控制环境的成分,导致感觉质量上的分散。

按照建筑规则,在这个过程中已经背离传统建筑的逻辑原则而广泛发展,变成了一个非常重要的角色。建筑比那些城市的建筑在规模上要大很多,艺术用来定义日常生活的地区,在特定的地域内有快速反应城市人类活动的信息。在这种情况下,许多事物例如建筑,城市的典型思想和空间内的建筑都可以被读取,它们用来定义边界或内部空间和外部空间的交汇地区;建筑就像是诺尔伯格·苏克斯<sup>1</sup>认为的那样,用来标记边界,限定地域,安排并组成环境。建筑用来重新构成一个完整地区的形象,就像是城市,建筑用来给与赋予逻辑的,有活力的视野,以此伴随着城市居民区内的居民,并通过不同的环境组成和特征来讲述时间,空间和地区特性。

在一个不具有明确界限的城市里,建筑变成了解释写作进程中的语法错误的文化工具,用来识别那些便于文学和对对象分析的关键要素,也被用来理解那些元素,模式和象征,为了避免背景价值的丢失,接受而不是拒绝。

在近十年里,有些国家几乎彻底擦掉了那些书写在建筑上的过去的历史的痕迹为了兴建一些新的建筑。十有八九,这种情况的发生是为了土地经济价值的提升,强加了无关机制的干预而没有发展或是思考与整体相适应的解决方法。

通常情况下,由城市形象带来的不可逆的更改是城市自身的特点,为此,许多财政力量都选择了这个确定的地点,由于市场放弃和经济崩溃的直接原因。历史建筑所具有的价值是十分

宝贵的,为了经济目的毁掉这些建筑将使得每一座宝贵的建筑和装饰一文不值,最重要的事情是要尽力去保存这些特征,并懂得如何使其增值。

城市的这种分裂的,多成分的形式使得我们不可能去认识他的每一个方面,似乎现在对于我们的眼睛来说他已经是一个稳定的要素了,不可能变得活跃。它内部的景观将其存在的方方面面连接在一起,像在一个物体的内部继续寻找稳定,他有一种趋势,即随着时间去确证一种熟悉的,被城市所限制的视野。

在人们居住的住宅区里也发生了一些变化,人们将新的一年不同的意识同过往的一年相比较,那些变成环境的活动极为相似,没有人注意到在多年之后城市的特征发生了巨大的改变。

有人说建筑就像是人类创造的贝壳。我认为这种形象很漂亮,我想解释一下他的原因。很明显,在某种意义上讲,贝壳是由软体动物或是寄居蟹所创造的;当我们观察外部的过程时或许能更好的某些方面,而在内部有很多雾气。通常情况下,贝壳以螺旋状生长,每一个环都讲述了他成长过程中的一段历史就像是建筑物的生长,以及伴随着人类的历史不断演变。想到这些相似性,很重要的一点是要反思一个事实,即贝壳依靠其自身不断的生长围绕着过去缠绕着生长,通过过去获得意识及接下来的发展方向,他未来的生长没有固定的限制,生长的潜力是无限的。此外,存在一种确定的图案,上面有不同发展过程的过渡条件:图案是一个环,因此图案的开始和结束的部分是重叠的。结构在多维空间里延续,在这里可以找到形式和内容的相似性。环可以代表人类通过意识行为付诸实践的活跃的反馈的过程。

罗伯特·马斯特罗教授为此提出了一个不错的城市定义“城市就像一个女人,由很多部分组成,眼睛,手,嘴.....我想象自己是一个美丽的女人,我剪辑这个世界上最漂亮的女人的形象为了能够变成这个她。最终我看到了这幅拼贴画....是如此的丑陋。”

城市不能仅仅是由美丽的建筑所构成的,它必须体现出组成他的各个部分的协调性。在一些看起来很丑陋或是不太重要的元素里我们会发现一种魅力,或许是他紧密地结合了这个形象的综合特征。这就是这篇文章主题的意义所在,“城市的镜子”。谁知道人们会把我们的城市想象成什莫样子,像照着镜子的女人;谁知道他们看起来怎么样,或者美丽,或者有的地方丑陋。谁知道人们会怎么想像他的特征,他的材料和我们穿在他们身上的衣服,谁知道或许他们也想像我们一样保持不变,保持它们年轻的特征,我们把它称之为历史的特征。此外,现实的反应似乎和真实不同,就像是远离形象知识的神奇般的变形。镜子和离奇的神话联系在一起,或许是荒谬的,它自身与时间相联系,展现出一种持续多变的形象。于是,当我们发现了一些不同时,我们应该想到城市正在经历着同我们一样相当规模的空间变化,我们应当像照顾我们自己一样关注着它。

<sup>1</sup> 出自:圣·帕里来罗,巴瑞尔研究经验,第五届恩库尔特国际研讨会。“文化遗产与自然遗产,必要的对话”西班牙瓦伦齐亚理工大学出版,2007年。圣·帕里来罗,卡里连风景,以及由圣·帕里来罗编辑的卡里连木质建筑。关于传统的卡里连建筑的保存的合作计划,第32-42页,佛罗伦萨,2007年。圣·贝尔托奇,圣·帕里来罗,蒙特布尔奇诺的历史中心的管理计划,卡提尼编辑,07年建筑信息系统研讨会,佛罗伦萨,2007年,108-113页。圣·帕里来罗,圣皮耶罗的城市中心,佛罗伦萨,2006年。圣·帕里来罗,城市绿地的命运,新技术对环境的贡献及城市绿地的研究,圣·帕里来罗编辑,从调研到工程:城市识别。新技术对遥远的的数据管理的贡献,64-83页,佛罗伦萨,2006年。圣·贝尔托奇,圣·帕里来罗,绿地保护:从人口普查到历史公园装饰性植物园遗产的管理;对扇间别墅公园的管理数据库的实验,普玛编辑,历史别墅和公园。知识策略,227-230页,佛罗伦萨,2006年。圣·帕里来罗,圣·贝尔托奇,尼克里,迪拜立,城市绿地管理,45-47页,于第九届欧洲城市森林论坛,5月21-27,由菲利尼,萨尔比塔诺和萨奈斯编辑,2006年,意大利佛罗伦萨。

<sup>2</sup> 出自:米拉利亚(编辑),模式图片,卡帕版,罗马,2004年,第54-55页

<sup>3</sup> 出自:阿·莫勒斯,银幕信息理论,“威尔瑟斯”,第二版,1月-4月,1972年

<sup>4</sup> 出自:诺尔伯格·苏克斯的景观,环境与建筑一书,埃莱克达,米兰,2003年,第六版