

BOOK OF ABSTRACTS



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URBAN SUBSTRATA & CITY REGENERATION

Morphological legacies and design tools

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URBAN SUBSTRATA & CITY REGENERATION

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Presentation

URBAN SUBSTRATA & CITY REGENERATION **Morphological legacies and design tools**

The fifth Isufitaly Conference will focus on the notion of the substratum in its various aspects.

First, the typological one, as a set of rules inherited from the built landscape that allow reading and conscious transformation. We cannot reduce, of course, the complexity and richness of our ancient heritage to universal interpretational patterns that classify types and processes in a kind of taxonomy of the Ancient (that is true for any built environment). Instead, the identification of a few common criteria that allow us to interpret these phenomena through an architect's eyes, tracing the many outcomes back to the general rationales that produce them, can prove useful to morphological studies.

Then, the physical shape of the historical layer, which in many ancient cities has determined the structure of the current settlements. Substratum is, from this point of view, the part beneath the current built landscape that has no longer a function but still contribute to the form of new fabric. It is the prolific layer that gives rise to multiple organisms. We could then consider a 'substratum' as the composition of elements that once belonged to a built fabric or architectural organism. 'Substratum' despite having lost both their relationship of necessity that bound them together (their purpose and original organicity), and the continuity between the different phases of change and development, still transfer specific characters to the buildings originated by them.

Finally, the intangible aspect, the heritage of projects, experiences, and researches that constitute the working legacy on which current study can be based.

The notion of substratum could be, therefore, more than a specific issue, a way of seeing the built reality useful to the contemporary project.

The term not only includes the ideas of rooting and transmission; it also refers to the means, the tools we can use to reach the essence of the form, of its universal being. This universality, a quality that the actual building did not possess, constitutes a fertile abstraction: a reading as well as a project, how we give a new unity to the multiple and scattered forms of the remains we have inherited.

Furthermore, another theme, which is complementary to the substrata one, is that of urban regeneration. It is a topic extensively investigated by urban research which, in this context, could be reconsidered differently and innovatively.

In continuity with the previous Isufitaly meetings, the theme of the conference proposes a debate on the topics of the urban form transformation at different scales, in the light of our cultural heritage understood as a design tool.

The conference will take place at Palazzo Mattei di Giove, built on the ancient remains of the Teatrum Balbi, in one of the Rome areas where the relationship between the present city and the ancient substratum is more evident, even in its contradictions (the Porticus Octaviae, the Teatrum Marcelli, the archaeological area of Largo Argentina).

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Lost in Transition. Urban substrata in a Chinese metropolis. The case of Nanjing Hehua Tang

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keywords: *transition, urban form, typological map, China, urban design*

Abstract

The aim of this paper is describing the morphological studies driven by the Joint Research Unit TRANSTIONAL MORPHOLOGIES (Politecnico di Torino and Southeast University Nanjing) on the urban fabrics of the Southern area of Nanjing, Jiangsu Province, China.

Hehua Tang area is located at the interior of the ancient city's walls, as part of the *Nanjing's Precious Historical City Conservation Zone*. Until 2016 it was composed by shacks and old and permanent courtyard houses, awaiting a new regeneration's season. The residents are local people belonging to the low-income working class and migrant workers. The social status of inhabitants, the question of ownership in China, the strongly-market-led urban regeneration in developed China, and the role of urban heritage in policy strategies, are the focus of the debate between developers, government and scholars.

We decided to trace a "typological map" of the entire area and to use it to check its development and its future projects. The result (one of the first attempt of "Caniggian" map of a Chinese city) is here shown for the first time in its complexity, describing one of the most important layer (*substrata*) of the ancient Ming town.

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Urban Fabric and contemporary dwelling in the Greek-Roman centre of Naples

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Keywords: *historical fabric, dwelling block, Naples*

Abstract

The paper concerns a research-didactic activity having as object the Greek-Roman historical centre of Naples. The general Urban Plan of the city allows the demolition and the reconstruction of the main part of an insula where there is now a high building of speculation except the monument – Pio Monte della Misericordia – that occupy the head of the block along the decumano.

If the insula is the project-area, the study area is extended to the whole ancient centre where the relationship between building typology and urban morphology exhibit the idea of a compact city that became too dense over the time but still 'porous' because of the voids of the courtyards, above all of the huge monumental complexes and of the monasteries.

The theme of the projects is the reconstruction of the dwelling block with many further degrees of complexity related to the context of a stratified and rich of history fabric that represents, in Naples, the World Heritage 'monument' more than the single buildings that constitute it.

Through the projects, it was possible to verify the possibility to introduce, in one of the more asphyxiated part of the ancient centre of Naples, a different idea of inhabiting, based on the introduction of 'degrees of exterior spatiality', trying to make space between the things but also to make cleared the support surface of the building in order to realize soil permeability and green areas: an idea of city able to recognize the values but also to formulate a critical judgement on the current situation and thus an architecture that wants to express the continuity of the history but without renouncing to expresses itself in the contemporaneity.

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Micro-urbanism – additional tool for urban heritage determination

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keywords: *micro-urbanism, urban morphology, urban heritage*

Abstract

The urban morphological analysis of historical urban fabric and the built environment is in the focus of the current study as the main tool for urban heritage determination. The paper is going to discuss the results of the micro-urbanism analysis within the framework of heritage evaluation.

The morphological regions and their more complex notion, the urban tissue types were designated as a base of urban heritage determination. Thus the *raison d'être* of urban morphological studies focused on morphological regions as the ensembles of the built environment, are indisputable.

The studied towns (mainly the historic core from the period of Austria-Hungary) belong to not only one, but to six countries nowadays (Hungary, Serbia, Slovakia, Romania, Ukraine, Croatia). Thus it is recommended to create amendments of the principles, that were established by a common UNESCO-ICOMOS platform. The lessons learned by detailed theoretical analyses of the UNESCO-ICOMOS doctrines and charters point out, that the urban morphological research and its different strata (urban forms, structural components, built environment, urban tissue and their interaction) act as background and fundamentals to constitute urban heritage proposals. Proposals for structural development and transformation of the built environment in the urban heritage environment (not exclusively protected by law, but considered as heritage) primarily reflects on the sustained cumulative lessons. The complex structural layers of specific urban tissue types have to be understood, due to keeping and maintain the character of the urban fabric and built environment, thus the identity of the town as a whole.

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Documenting the disappeared Rome: the San Marco district

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keywords: *San Marco district, urban continuity, philological restoration, typological reading*

Abstract

The research concerns a lost part of the city of Rome: the San Marco district, along the slopes of the Capitol. The evolution of the inhabited area began in the Middle Ages, based on an archaeological substratum of Roman era, and continued to develop until the end of the nineteenth century, when the transformation activity brought to the heavy demolition of the historical fabric. The result is the denial of urban continuity, produced by the creation of a new neighborhood, different in morphology, scale and urban function: from a dense housing fabric, varied in building types, articulated in the urban structure, to a ceremonial and celebratory space, expressed by the system of the Monument to Vittorio Emanuele, piazza Venezia and via dei Fori Imperiali. The purpose is the reading of the historical formative and typological process, as well as the redefinition of the urban fabric through the philological restoration methodology extended both to the whole pattern and to the single building. The reconstruction of the neighborhood before the demolitions refers to 1871 as time limit, corresponding to the Urban Gregorian Land Registry updating. The information base consists of documentary data, such as archival, iconographic and photographic sources, associated with the typological reading of the fabric. This provides a reconstruction of the urban consistence through the critical analysis of sources. The restitution of the urban fronts and of the building facades arises as a necessary outcome: this work of interpretation and redrawing translates into a re-design process.

Underlying, extended and updated Rome in Valencia: the historic definition of Ciutat Vella as the core city.

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Keywords: *Valencia, historical urban patterns, preexistences, regeneration process*

Abstract

The historical city in Valencia, *Ciutat Vella*, appears as a single unit into the whole city, but into the former walls there are three main areas from the same number of ages in history. So, there's Roman foundation as the core city until the 3rd century, a Muslim extension into a "C" shape around the 10th century and, finally, an embracing Christian precinct from the 15th century. Each one develops a single urban pattern, according to the territory being occupied. Romans chose an island in river Turia; Muslims filled it up almost as a total built area; and Christian city absorbed part of the irrigation system around the city. All those pre-existing lines shaped each urban pattern, and they can also be red in the present city. That 15th century wall precinct became almost the whole city of Valencia till the 19th century, when it had to be updated because of its unhealthy situation and bad sanitary conditions. On the other hand, updating was also a requirement from the Government to develop new extension areas of the city out of the walls: the *Ensanche* plans. So, in 19th and 20th centuries two main urban renewals were developed in a Haussmannian style, with a special attention to the pre-existing urban pattern and heritage. The analysis of the underlying city centre of Ciutat Vella defines almost a sort of historical urban development model on the large river flood plains all over the Mediterranean area in Europe.

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Why an Atlas? Reading of the cultural substrata of the Portuguese building typologies

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keywords: *Buildings, Typology, Atlas, Urban Morphology, Portuguese City*

Abstract

The theme aims to demonstrate the importance of a morphological atlas in the characterization of the urban elements that composed the present city, particularly on the reading of the cultural substrata of the Portuguese building typologies.

This study is integrated in a wide research project proposing the construction of a Portuguese City Morphological Atlas that has been built over the past decade, analysing in this final chapter the built typologies - refracted through the “common house” and “singular building”.

The project aims to build an interpretative database that will be an irreplaceable tool for reading, research and even to intervene in the built fabric. In this sense, the work as a whole and in each of the parts that compose it, seeks to achieve two main objectives: The first is to provide an educational tool for the study and teaching of architecture and urban planning. The second is to provide an instrument for reflection and practice of urbanism, a collection of types made from concrete and known examples, treated and assumed as typological basis for the conception of new interventions.

In graphic terms, the work has as an objective to characterize each building in an identical and comparable way, ie using the same representation codes and the same scales, from a series of reference drawings, interpretative diagrams, photographs and texts, addressing to the built fabric and its components from the viewpoint of genesis, morphology and primary uses.

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Il concetto di morfo-tipologia nell'organismo urbano di Alberobello

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Keywords: *Tessuto storico, Percorsi, Pertinenze*

Abstract

Il tema proposto sulla città di Alberobello è il risultato di una ricerca eseguita all'interno del Laboratorio di Tesi di Laurea promosso nel Dipartimento Dicar del Politecnico di Bari. L'analisi eseguita alla scala dell'insediamento consegue il fine di ricostruire le fasi di sviluppo a partire dalla formazione del nucleo originario fino all'assetto maturo conquistato nel XIX secolo.

La città nasce a ridosso di una "lama" e risulta costituita da due differenti nuclei connotati da percorsi irregolari condizionati dalla morfologia del suolo. L'assetto originario della città è stato ricostruito da una carta storica, degli inizi del XVII secolo, in cui compaiono alcuni aggregati rurali sul promontorio di Aia Piccola e, in prossimità dei percorsi tracciati longitudinalmente all'orografia, nel pendio del Rione Monti (entrambi i nuclei rientrano nella perimetrazione Unesco). La logica di connessione delle fasce di pertinenza dei sistemi lineari a trullo sembra potersi comparare a quella tipica dei sistemi medioevali con una iniziale edificazione su percorso "matrice", una successiva su percorso di impianto e, a volte, con la chiusura dell'isolato attraverso l'edilizia su percorso di collegamento. Similmente ad altre configurazioni analoghe, la relazione gerarchica dei percorsi può variare in relazione alla coesistenza di più tracciati preesistenti o pianificati, determinando un differente ruolo del costruito.

Con la lettura delle fasce di pertinenza e la definizione gerarchica dei percorsi è stata, dunque, ricostruita la relazione che si è instaurata tra gli aggregati che configurano gli isolati presenti specie nel rione Monti. Tale operazione critica, eseguita riconoscendo i tipi edilizi e la modalità aggregativa con cui si relazionano, nonostante gli scarsi elementi documentari a disposizione, permetterà di suggerire una prospettiva di possibile recupero urbano prevedendo l'integrazione di tutte le funzioni e le attitudini (residenza, servizi, attività commerciali, ecc.) che definiscono l'organismo urbano. Provando così a invertire la tendenza odierna in cui tutto il tessuto risulta destinato a soli fini turistico-ricettivi che negano quel mix tipologico-funzionale che la renderebbe città in senso proprio.

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Metamorphosis of Urban Form in A Historical Nutshell; A Critical Perspective

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Keywords: *Urban form, metamorphosis, social psychology, contemporary city*

Abstract

Urban form is the interface between the social life and the physical environment of the city. Form based practices, cannot be thought without human dimension. It is people and their living styles that shapes the urban character in a place. Urban form as, communizing tool, a unifier; to identify one's reign and land that emphasizing democracy and equity. It also emphasizes 'familiarity' through an urban code; information provided by the intersections of different urban layers or elements in various cases. Form was created for natural reasons and human based reasons. In ancient city forms and formations, the site selection of settlements seems only dependent to the topography, they are not any different than the primordial instinct of human (Rykwert, 1976). However, in time with the increasing number of population and the concern of managing the resources, urban forms started to be shaped by various dynamics. Accordingly, form-based study of this paper includes different paradigms and perspectives appropriate to the time period studied. Ancient urban form, its generation process and the metamorphosis experienced in route to contemporary form and its own dynamics are the two main research fields of the study. By doing this, after the identification of two mentioned phases, a critical review of change process of urban form is focused on. At the very final, reimagination of urban form generation will be discussed for further.

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Reading the historical urban fabric of Trastevere

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keywords: *Trastevere; Rome; historical urban fabric; historical formative process; urban restoration*

Abstract

The paper aims to offer a contribution on the urban morphological analysis of the ancient populated area of the Trastevere district within the southern Tiber bend in Rome.

The *Transtiberim*, for a long time physically, socially and economically “far away” from the city’s development dynamics has maintained its urban features. Starting from the seventeenth century it has undergone radical transformations especially during the nineteenth century as result of the urban papal policies and as consequence of the post-unification general master plans. The twentieth century expansion completed the process by filling the free areas. Despite this, the urban structure preserves the “signs” which guided its historical evolution, in particular the street network and the roman land division.

The reading of formation and transformation process of the historical urban fabric is based on diachronic analysis tools: cartographies, iconographies and historical documents, with the input of other disciplines such as geology, archaeology and the ancient topography studies. In terms of method the dissertation moves from the urban morphology approach of Saverio Muratori, Gianfranco Caniggia and his collaborators, completing this method through the contribution of the study of the premodern constructive art techniques of the roman school of Paolo Marconi.

The analysis start from a reconstructive reading of the natural landscape before human intervention, which influence the urban structure of the first settlement, *the ancient substratum*, the hidden layer at the base of the current urban form, then moving to the XXth century recognizing the main phases of the urban development.

The Vacant City as the contemporary *substratum*. Why and How the crisis enables regeneration processes

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Keywords: *Abandonment, claim, regeneration, praxis, convention*

Abstract

The *Vacant City* is the heralded outcome of the crisis of former Urban Renewal processes and later global densification strategies. However, this was not, as many were, and are still, arguing, the effect of a conscious decision driven by financial capitalism. On the contrary, it was the unconscious result of its legacy progressive abandonment forced by the “people of the debt”. Because of that process, they became increasingly aware of performing simultaneously as victim as well as accomplices of the former perverse mechanisms. Consequently, we have been witnessing the loss of the implicit conventional bond between the society’s member behavior, their productivity and the city’s spatial arrangement. Assuming this framework as its explicit premise, the paper first questions the nature *per se* of existing building abandonment condition, tracing it back to its historical precedents, and its functionality within the city’s life cycle, analyzed it in the light of existing power-relation system criticism. Secondly, it reflects on the fact that the concept of *substratum*, prompted by the processual typology mainstream, is inextricably related to the emerging claim of vacancies and waiting lands as the immediate reaction to a declared crisis. Finally, to support those interpretations, the paper will present some contemporary emerging phenomena, by which the reclamation of abandoned areas is leading to unpredictable regeneration processes. To conclude, those actions will be described as unprecedented evidence of praxis, compared to the traditional ones. New form of conventionality will eventually flourishing from this scenario.

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Giovannoni's "diradamento" as a congruent transformation of urban continuity.

Applications and limits of a philological device for core city re-generation.

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Abstract

The text that is proposed for the conference will focus on the primary role played by Giovannoni in defining an original strategy for the protection and enhancement of urban heritage in Italy in the early decades of the twentieth century. It is in the projects of the ten years of 1910 that he outlined the theory of thinning. This theory is offered as an alternative to the aesthetic and radical reclamation of the historic city, an urban policy still widespread in the early twentieth century.

The reflection that will be developed is related to the possibility of interpreting today the measured, "scientific" cut of the building proposed by Giovannoni as a way to follow for the regeneration of old centers. To this regard will be analyzed the plan for Rome, comparing it with those of Bari, Old Naples and other significant examples of this type of approach to urban restoration. From these examples will try, finally, to understand if rules can be drawn for the current planning aimed at sustainable urban regeneration of public spaces.

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Shifting point-attractors: the central-symmetric flexi of via Flaminia and via Clodia near pons Milvius, Rome.

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Keywords: *urban morphology, attractors, repellers, architecture*

Abstract

Recent urban morphology studies consider urban tissues as living organisms changing in time (Strappa, Carlotti, and Camiz, 2016), roads can be considered as organisms as well, and their diachronic deformations have been interpreted following the theory of attractors (Camiz, 2018). This research analyzes the flexi on either side of the river along the *via Clodia* and the *via Flaminia* near *Pons Milvius* in Rome, and interprets them as the effect of a shifted position of a point attractor. The *via Flaminia* was established in 220 BC by the censor *Gaius Flaminius Nepos* (Messineo, Carbonara and Caserta, 1992), the *via Clodia*, running along an earlier Etruscan route, was paved in 225 BC. The *pons Milvius*, also known as *pons Mollis*, connecting the two sides of the river, was built by *M. Aemilius Scaurus* in 109 BC (Messineo and Calci, 1991), even though an earlier structure in wood is mentioned as early as 207 BC (Palombi, 2011). A flexus occurs along both the rectilinear paths of the two streets, following a central-symmetry: the change of direction is towards the East along *via Flaminia*, and towards the West on *via Clodia*. This central-symmetric configuration led to the reconnaissance of a differed attraction pattern within the trajectory of the road that we interpreted as the result of the modification of the ramps of the bridge occurred sometime after the foundation. The cross comparison of documents, iconographic and cadastral sources together with archaeological evidence lead to the confirmation of the hypothesis, showing that the deformation and the consequent *layering* (Strappa, 2018) happened after the demolition of the lateral ramps by Maxentius in October 28th 312 AD during the homonym battle

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The idea of morphological regions as a tool in planning and design

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Keywords: *Urban form, historico-geographical approach, morphological regions, morphological analysis*

Abstract

A great deal has been written on how to get a better understanding of urban form, to identify transformation processes of existing types, patterns of urban form elements, and types of forms. The idea of 'morphological regions', proposed within the historico-geographical approach by M.R.G. Conzen, has been one of the most powerful tools to overcome the difficulties of reading extremely diversified urban forms. The concept of region is clear. A region is an area that has unity in respect of its form that distinguishes it from surrounding areas, based on a combination of town plan, building fabric and land and building utilization. However, the concept still remains elusive among scholars and practitioners in regarding to how it deals with reading urban form, and what the capability of the concept is. On this basis, this paper attempts to clarify these inexplicit aspects. The paper has two main goals. First, it identifies the establishment morphological region on the basis of the tripartite division of the urban landscape - the town plan (streets, plots and their aggregation into street-blocks, buildings), the building fabric, and the land and building utilization. Second, it demonstrates the ability of the concept to be applied into planning and design practices. In this way, it is elucidated that reading urban form based on the idea of morphological regions can serve a sound basis for: new design, conservation area delimitation and control, heritage management, character assessment, urban landscape management, suitability and effectiveness of area preservation, and enhancement strategies.

Urban aesthetics: the haussmannian urban form and the configuration of the city of Erechim/RS, Brazil

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Keywords: *Urban aesthetics, Urban form, Urban intervention, Paris, Erechim/RS, Brazil*

Abstract

This paper aims to examine the process of founding the city of Erechim, State of Rio Grande do Sul, Brazil. The interest of this study lies in understanding how the urban intervention plan devised by Baron Haussmann for Paris was instrumental in proposing urban guidelines for a small city in the interior of the state of Rio Grande do Sul in 1917. A part of the territory of the state of Rio Grande do Sul, between the end of the nineteenth century and the first decades of the twentieth century, went through a process of demarcation, fruit of the colonization movement. The immigration plan for the newly created city of Erechim took place in 1910, however, there was a delay, claiming that the future city should be planned. Engineer Carlos Torres Gonçalves, head of the Directorate of Land Demarcation, was responsible for the urban form assumed by the city of Erechim. The guidelines idealized by the Engineer followed positivist ideas of the time, inspired by the monumental urbanism, strongly influenced by the route that Haussmann proposed for the city of Paris (Fünfgelt, 2004). The occupation of 15,000 inhabitants, with 2,500 lots, and future territorial expansion were foreseen. With the rectilinear layout, the chess mesh resulted in blocks of homogeneous dimensions. In the central square, the installation of the political, administrative and religious center was proposed. Eight squares were planned, by the central axes, creating perspectives from escape points. The city of Erechim reflected and assumed a new urban order of the time: the city as a modern aesthetic form.

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***Coincidentia oppositorum*. The building of the urban form in O. M. Ungers**

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Keywords: Ungers, city-archipelago, Berlin, urban form

Abstract

In 1977 O. M. Ungers, with his assistants at Cornell University R. Koolhaas, H. Kolloff, P. Riemann and A. Ovaska, publishes a plan-manifesto about the city of Berlin: "Die Stad in der Stad", in which is expressed a new model of development and composition for the contemporary city: the "city-archipelago". With the aim to reflect about the problems and the issues of the urban form into contemporary, the research group draws up a programmatic plan where starting from the 'given value' of the structure of the urban form deposited by the history and remained, more or less manifest after the bombing, is developed a new concept of city for parts, where each part is enhanced in its 'singularity' and where the green, the space of nature, assumes the role to connect/ untie the same 'singularity'.

The research starting from the analysis of the plan and the theoretical lecture developed into the program-manifesto and focusing on the plans realized for Berlin later by O. M. Ungers, aims at the reflection and the updating of this experience by its re-reading. The confused growth of the periphery, the alienation of the individual into the place in which lives, the necessity to give answers to the form of the contemporary city, are still open issues.

The research of Ungers is focused on the necessity to refound the problem of the form of the city starting from the same architecture, basing on the identification of the substratum, modern or ancient it is, looking the architecture as "*coincidentia oppositorum*" of the contemporary city, giving them form, assuming its complexities and contradictions.

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An examination of the morphological change of the Roman “cardo” -case of Adana/Turkey

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keywords: Adana, Abidinpaşa Avenue, cardo, urban morphology

Abstract

This study aims to examine the morphological change of the Roman main road “cardo” and the reasons behind the change focusing on 20th century urban development processes. Within this aim Abidinpaşa Avenue in the historic city of Adana/Turkey, one of the oldest city axes with a historical background of 4000 years and a length of 700 meters is chosen for investigation. The Avenue is connecting the Roman Bridge over the River Seyhan with the eastern city gate and it has survived from the Roman period having physical features similar to cardo maximus, which was one of the main axes of the Eastern Roman cities. Due to its multi-layered structure, the avenue, which consists of many buildings belonging to different periods, has changed rapidly due to urban policies in the development process of the city of Adana in the 20th century and this change has shown its effects on both its physical and social means.

The examination was undertaken in three stages. The first stage involved the analysis of the historical development of the avenue using historical maps, drawings, press releases and various visual documents. Secondly a morphological analysis was carried out based on the morphological approach developed by M.R.G Conzen. While the cadastral map dated 1938, which is the oldest map containing the necessary data for the study area, determines the early 20th century urban fabric, the analysis of the maps of 1965 and 1985 contributed to the understanding of the change until 2018. And finally a typo-morphological analysis was undertaken on the dwellings located on the avenue aiming to understand the relationship between morphological and typo-morphological processes.

The study revealed that the street fabric and block-plot relationship were the least changing features on the avenue, as a result of urban policies and various practices since 1938 until 2018. While the physical form and the length of the “cardo” had survived, it is ascertained that the development pressure was seen in the eastern and western ends of the road, which resulted in the construction of higher buildings having contemporary functions. The blocks located in the middle parts of the avenue, on the other hand, seemed to be less affected by the development pressure.

Industrial heritage as an overlooked potential in urban heritage.

Case study Miskolc-Diósgyőr

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Keywords: *industrial heritage, revitalisation, urban fabric*

Abstract

The industry has transformed towns significantly since the Industrial Revolution. This transformation is often a negative turn, creating degraded landscapes, but it also has positive benefits since industry might create value. Built industrial heritage is an important element of local identity for cities with significant industrial traditions. Due to the special situation of industrial, industrial-related architecture, carries information that cannot be retrieved elsewhere and represents touristic potential. Miskolc is the third-largest city in Hungary today. Its population has fallen dramatically, the reason is the decreasing heavy industry in the 1990s. The city's iron and steelworks were founded in the 1860s. The new plant legally belonged to the neighbouring Diósgyőr, but in reality, it was located in the inhabited area between Miskolc and Diósgyőr. The two settlements have now merged with the ironworks. The abandoned industrial area of about 200 hectares with numerous architecturally valuable buildings is causing serious problems in the structure of the valley settlement: it is located in the urban fabric as an enclave. Through the example of Miskolc-Diósgyőr, the study examines the possibilities of protecting and revitalizing endangered industrial heritage. Layers of perception place industrial area in history and the urban context. They point out their unique and complex architectural features. The urban fabric surveys reveal the internal conditions and its relationship with the town. Through examples of foreign industrial areas and compared with our case study, the feasibility, resilience and economic potential are also highlighted.

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The Good, the Bad, and the Ugly

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Keywords: *environment, geometry, regulatory, suburban sprawl, urban grid*

Abstract

“Author” (2018) argues James Oglethorpe’s Savannah ward plan is a synthesis of Roman *plan castrum* and Spanish Laws of the Indies plan models with an American tendency to elongate urban blocks for economic reasons. The ward plan also incorporates double, even triple-loading of building/lot entrances along east-west streets (Anderson, 1989). Space syntax analysis demonstrates this stabilized the topo-metric characteristics of the spatial structure during the first century of the growth in Savannah (“Author,” 2018). In urban design terms, this represents the instrumental power of Savannah’s plan for generating vibrant, human-scale urbanism. However, urban history and planning literature often focuses on the transitory mapping of the political structure in the ward plan. (Reps, 1965; Moholy-Nagy, 1968; Kostof, 1991; Wilson & Shay, 2014). Rarely, if ever, does anyone discuss urban growth in Savannah after the 19th century. This paper presents the results of space syntax modeling of Metropolitan Savannah/Chatham County in 2019. Nearly 11,000 urban, suburban, and rural streets represented as axial lines compose this model incorporating a metric area of more than 1,600 square kilometers (or nearly 400,000 acres) and a population of nearly 300,000 people (Source: US Census Bureau). The paper argues urban growth in Metropolitan Savannah represents a stark contrast to the compact, human scale of Oglethorpe’s original vision for the town. What emerges is a radical increase in cul-de-sac sequences and loss of inter-connectivity during the 20th and 21st century due to environmental regulations, modern transportation planning, and the economic benefits of suburban sprawl.

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Lasting transformation of Erenkoy

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Keywords: *Erenkoy, urban transformation, demolished landscapes, urban pattern changes*

Abstract

In the beginning of 19th century, many subsequent fires occurred and the residential districts were damaged in the old town (historical peninsula) of Istanbul. On the other hand, the searches for new settlement areas began in line with the population increase of the city. The uptown areas have been made accessible by the service of railway line and sea transportation. Until that time Erenköy was a small village and after 19th century it became a well-known settlement. Dignitaries and dynasty members began to purchase wide lands. Most of these lands were planned to be used as vineyards, gardens, and cottages designed with picturesque anxiety were built on them with. By the beginning of 20th century, some new houses were started to build as samples of Modern Movement. As of 1960s the population increase of the city has become uncontrollable and housing needs have become a major problem. In this period, multi-storey apartment buildings have begun being built throughout Istanbul. Unfortunately, these practices were supported by the government with some approved laws and development plans. In Erenköy, firstly the vineyards and gardens were used as apartment buildings and in the following period, cultural heritages like cottages and modern houses were being demolished to make apartment buildings. Although it has been only 150 years since it was opened for settlement, the changes that Erenköy has experienced are an indication of how fast Istanbul is transforming. This paper focuses on Erenköy experience with criticising policies and comparing master plans of various years.

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The effects of planning decisions on the traditional urban fabric of a historical city: The case of Gaziantep in 1968-2008

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keywords: *Gaziantep, urban planning, urban fabric, urban morphology*

Abstract

Contemporary cities are suffering from several consequences of inefficient planning decisions such as the loss of traditional urban fabric, lack of site-specific decisions, inability to predict the effects of migration and investments to the cities. The use of urban morphology methods within the urban planning process can have special importance in dealing with such consequences.

Gaziantep, is an historic city dates back to ancient civilizations and located in eastern Turkey, and has traditional urban fabric as a heritage site. The city is an example of inefficient planning decisions fails to cope with to rapid urbanization. Also traditional urban fabric of Gaziantep has undergone significant changes due to migration and industrial investments after 1950s.

In this respect, the urban fabric examined with the Conzenian town plan analysis approach. Yaprak Mahallesi was chosen as study area for town plan analysis on the scale of the neighborhood. The study area is located in the fringe of Gaziantep's urban conservation area. The traditional urban fabric in this neighborhood is under the pressure of large-scale urban projects adjacent to the area such as an urban regeneration project and a shopping mall .

The street system, building block-building relationship, building-parcel relationship, and floor height analyzes were conducted in this area in 1968-2008. The study shows continuous change in the traditional fabric even though the neighborhood still has traditional characteristics. The study tries to trace the planning decisions that have both positive and negative affects to the case study area.

Transitional Morphologies in the Global South

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keywords: *Transitional morphologies, informal settlements, Africa, new cities*

Abstract

The accelerated phase of urbanisation in developing regions occurred in the last half of the 20th century. Nowadays, a large part of the developing world, labeled as “Global South”, is still characterised by rapid urban growth. In these areas, processes that initiate in the margins challenge traditional dependencies of “outsides” from “insides” and definitions of urban, suburban, peri-urban and rural, have become blurry. The term “transitional” refers to elements in the process of change or in the process of “becoming”. For this study urban forms in Africa’s new (sub)urban scenarios become transitional morphologies to be analysed. African cities have been catalysing attention since statistical data show that they will hold about 21% of the world’s population in the coming years. This increase in urban dwellers implies a rise in the demand for urban housing, infrastructure, and services. Evidence of the phenomena is tangible, new increasingly large-scale morphologies can be appreciated all over the African continent. Two main morphological singularities coexist in these contexts: informal settlements and new large-scale planned projects. Using geographic information systems and urban morphology as decoding artefact, case studies are analysed as they develop in time; with the aim to understand their spatial character, their rules and the current dynamics of their development. This paper highlights the partial results of an ongoing mapping research project that intends to frame the spatial character of transitional morphologies. In this sense, urban morphology serves as a tool that allows emerging morphologies to be mapped and compared.

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Morphological features of small industrial towns

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keywords: *Perm region, monotowns morphology, urban fabric*

Abstract

The article presents research of small industrial towns in Perm Region in a retrospective of state urban planning policy. On the basis of archival and town-planning data the question of spatial transformation of industrial cities was studied. The influence of the city-forming enterprise on the development of urban morphology is shown. Single-industry cities are a global trend of industrialization in the late XIX - mid XX centuries in particular countries. In Russian practice these territories are usually called "Monotowns". Until the end of the 1920s, Russian monotowns were built as a "city-plant" and formed the space of the city around the plant. The functional zoning changed with the appearance of the "Garden town" and the "Socialist town" concepts (Meerovich, 2016; Milyutin, 1930). Since the mid-1950s the principle of microdistrict planning (Stanilov, 2007) has been actively introduced, as a result, urban fabric becomes more "friable" with low connectivity. The downtown is obtaining uncertain features. The small industrial towns in Perm region have the characteristic traces of the Soviet period of urban development, in which the morphological structure was submit to the enterprise and frequently had no human scale. The transition from a public administration system to market relations has had a significant impact on changing urban morphology. The scale of transformation in monotowns is both general and unique. The article contains reflections on the impact of state urban planning policies on the texture of urban fabric of monotowns, formed in various historical contexts.

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Gridded Urban Morphologies, sub-Saharan Africa and Senegal: Research Historiographies and Present-day Realities

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Keywords: *Grid-plan legacies, historiography, African/Islamic/French/Urban Studies, Senegal, Sufi settlements*

Abstract

In Western (Eurocentric) research traditions of urban and planning histories, sub-Saharan Africa is generally denied an urban past, an urban settlement-design culture, and especially an indigenous practice of grid-planning. It is against this state of research that indigenous grid-pattern settlements in Senegal are analyzed in our paper, with relation to the gridded tradition of (post-)colonial settlement-design. The paper demonstrates that urban grid-planning emerged independently in Senegal, before European colonization, while also shifting the discussion from morphological essentialism regarding the genealogy of the grid towards a more interactive, poly-centric and processual approach reflecting present-day realities. The sensitivities inherited in African Studies will be also brought to the fore, as developed against the background of the historiographic tendencies that characterize Islamic Studies, World History, (Global) Urban Studies and the current literature on grid planning. The paper therefore provides a critical overview of the research atmosphere in various interfacing fields, giving special attention to global North-South relations. A series of past and contemporary important urban centers (mostly Sufi) in Senegal will be examined, employing rich and variegated methodology, sources and fieldwork. Through a focus on grid plan literature, the enduring need to de-Eurocentralize global urban history will be highlighted, while proceeding towards a more inclusive, integrative and hybrid post-colonial urban planning cultures.

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Planning for Green Spaces: Lisbon and Rio de Janeiro XX century urban plans

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keywords: *Green Spaces; Urban planning; Urban Visions; Sustainability*

Abstract

Urban planning in the 20th century was marked by debates regarding how to ensure nature was brought back into the urban environments. As such, various branches of planning thought, at the formation of the discipline, considered integrated approaches to define visions of green cities. Namely, the influence of the Garden City idea, the French *Urbanisme* and numerous green-wedge models circulated far beyond their points of origin. Through processes of transnational exchanges of ideas, such distinct planning concepts often merged, got adapted and transformed themselves as part of acts of reception in new territories. This paper introduces a comparative analysis of two urban planning proposals from the 1930s – for Lisbon and Rio de Janeiro – both delineated by the French urbanist Alfred Agache. Facing distinct geographical, socio-economic and environmental conditions, Agache's plans resulted differentiated. Nevertheless, common threads can be perceived, in particular regarding the Garden City idea and its adaptation to large urban settings. Traces of Agache's plans can be perceived, for instance, in the maintenance of green wedges in Lisbon and Rio de Janeiro throughout time. This paper will explore matters of permanence and change in dealing with planning ideas over time, and their manifestations in urban form, through a comparative perspective. At a moment when the sustainability question demands contemporary urban planning to rethink the way nature and their ecosystem services are integrated within the built space it is therefore important to re-examine such past experiences to retrieve the necessary lessons to help us face our contemporary urban challenges.

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Transitional form of industrial mixed-use

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keywords: *urban morphology, mix-use, industry, urban economy*

Abstract

The re-adaptation, re-use or mix-use of buildings is not a prerogative of these years and has a long and complex history. Indeed, in the past, the dilapidated buildings or the ones no longer suited to their original function have been revisited in terms of spatial, functional and stylistic characters. Speaking of reuse and mix-use includes a reflection about the shape of the city. In particular, the transition from an industrialized city to a post-industrial one brings with it the characteristics of dismissal and re-use, passing through practices of urban, social and economic policies. This work presents a research based on studies about mix use of industrial areas inserted into the urban fabric in Tortona district in Milan. This case study, appears as fertile ground for considerations regarding this type of transition, from industrial and worker district to cultural and productive district. The investigation on the simultaneous presence of manufacturing processes and other use of the space (residential, offices, cultural or exhibition places) is necessary to understand if economic changes and urban policies affect the spatial configuration of a part of the city. The on-going research is conducted through the comparison of Tortona maps in different periods and at different scales to highlight change over time and morphological transformations.

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Urbanscape as Landscape Emanation of East Adriatic Coast

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Keywords: *Urbanscape morphology, Heritage Urbanism, seascape, mountainscape*

Abstract

Research is encouraged by twenty-five centuries of uninterrupted urban culture on Eastern Adriatic, a landscape of indented coast, thousand islands and mighty mountains. Urbanity emerged from the landscape (Bojanić Obad Šćitaroci, 2018) - transforming the same landscape into urbanscape. The concept of urbanscape emanation is recognized in the effect that landscape has on urban development as a factor of urban continuity. The landscape is therefore identified not only as a substrata of the city but as an active participant in urban development and continuity.

In contemporary urban and spatial planning of East Adriatic Coast, the landscape is regarded as an urban context, as setting, and not as an active factor of urban identity, morphology, development, and regeneration. Research objectives are to critically assess the phenomenon of the landscape as a factor of urban identity, form, and continuity, and to set the basic categorization of urbanscape morphology transformations in East Adriatic Coast cities.

Research methods are based on the Heritage Urbanism approach, comprising of three main components: factors, criteria and models, and comparison of case studies. Case studies are cities of Eastern Adriatic Coast developed between the strong natural landscape of seascape and mountainscape. Those are cities of significant urbanization and development of tourism since the 1950s, which has transformed the coastal landscape of East Adriatic (Sopina and Bojanić Obad Šćitaroci, 2018). Case study comparison regards urbanscape morphology through analysis of orthophoto from the 1960s and 2010s (landscape reality), and historic illustrations and contemporary photographs (landscape representation).

The aim of the research is setting types and models of urbanscape morphology transformations that establish urbanscape as landscape emanation of East Adriatic Coast.

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SEASHORE STREET SUBSTRATA. Morphological analysis of an urban element of Portuguese waterfront cities

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keywords: *urban morphology, decomposition elements, seashore street*

Abstract

Flooding and erosion, due to the rising sea level, are affecting coastal cities.

The research focuses on the Portuguese coastal territory, a strip that extends for about 943km where 80% of the population lives, namely the urban seashore street of coastal settlements, a landscape that lies between the city and the water, a vulnerable space due to the consequences of rising sea level.

This coastal landscape was originated from the needs of fishing and port activity, but since the 19th century it has suffered different urban transformations that led to the establishment of the seashore street as a referential urban element in coastal villages and cities. Today it is recognized as a cultural place, voted to tourism.

The paper addresses the relationship between the composition elements, the persistence of urban form and the connections amongst components in the seashore street, an urban element of the Portuguese waterfront cities. In the seashore streets' space co-exist different type of elements: fixed - architectural, heritage, religious, infrastructural - and flexible - temporary leisure installations - that interface with the consolidated urban nucleon.

Through morphological delayering of strata and decomposition of the seashore street elements, it is possible to acknowledge the characteristics and relations in the foundations of these complex systems.

The aim is to describe and explain the different substrata, decoding relations between the established city and the volatile appropriation of seasonal leisure structures. The usefulness is to create a cultural grounding to answer the necessary adaptation of these inherited territories to their inevitable becoming.

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The role of paper mills in the Quebec's cities urban development

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Keywords: *Paper mills, industrial heritage, urban development, morphological characteristics, requalification*

Abstract

The cityscape and territorial layouts of numerous cities in the province of Quebec are built upon industrial heritage. In 2001, this territory counted 64 paper mills that contributed to the 20th-century urban development.

This infrastructure is made of production-specialized buildings, which location is mostly based on transportation needs (harbours, railroads, highroads) to ensure supply of raw materials, shipments of manufactured goods, as well as labour. Although the Pulp and Paper industry remains one of Quebec's main economic actor, the current changes in newsprint consumption threatens this form of export and its production. Quebec produces 41% of the newsprint in Canada which counts for 10% of the world production (Gouvernement du Québec, 2019).

In Trois-Rivières, post-1945 newsprint capital, a paper manufacturer's site is under renovation. In Quebec City, the White Birch facility by the St. Lawrence River will most likely be shut down within the next 5 to 10 years. Once peripheral, these sites are now central locations raising urban design matters regarding the goal of sustainable urban form. How can we understand and address these sites?

The presentation delineates Quebec paper manufacturers' morphological, urban and architectural characteristics. This explains these facilities' geographic context and privileged location close to natural resources and transportation networks. The site design and building layout show an evolving production. For tomorrow, what should be saved? How can the sites and buildings be requalified? This research opens discussions on the potential for use of these industrial churches as well as their limitations, both in their original function and a possible conversion.

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Unplanned urban fringes in the small size towns. The case of coastal urbanization of Liguria

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Keywords: *morphology, urban fringe, GIS, urban form, spatial analysis*

Abstract

The urban fringe theory can be adopting to understand how transitions and transformations from rural to urban space happened. Spaces historically identified as rural have changed in urban ones through a transition based on their original morphological characteristics. For instance, road patterns, land and plot structures and related uses, considering their historical evolution too, seem to play crucial roles in different urban belts establishment. In Italy, and in many other cases, the rural-urban transition has normally happened without a “plan”. This contribution aims to reconstruct the urban fringes dynamics through the study of the case study of part of the area called “Riviera Ligure di Ponente”, a coastal area where a set of little sized towns has been grown through a series of urban unplanned fringes. The study starts from the diachronic reading of cycles of territorial development that have gradually formed the present settlement. The case study looks particularly interesting thanks to the possibility to analyze, in a relatively not extended geographic scale, complex transformations in the urban fabric, covering a long period which saw a strong acceleration during the last 50 years. To achieve this goal, the research started from a GIS-powered morphological reconstruction, implementing a simulation model based on spatial analysis and geosimulation techniques. The use of spatial analysis techniques also allows the construction of scenarios in which it is represented how the process of urbanization of the last 50 years has radically “altered in the persistence” the original settlement structures and also allows us to represent the possible evolutions of the settlement system.

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Search for a new landscape 'order'.

Reading of some contemporary design experiences

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Keywords: *Landscape, architectural project, settlement principles, order, 'natural matrix'*

Abstract

"The built environment that surrounds us is, we believe, the physical way of being of its history, the way it accumulates, according to different thicknesses and meanings to form the specificity of the site not only for what that environment appears perceptually, but for what it is structurally. The place is built from the traces of its own history ". So wrote Gregotti in the Casabella n. 482 of the 1982 (by him directed). Starting from this assumption, we can recognize how the landscape does not represent a spatial condition within which 'dissolving' architecture, but on the contrary, can be explanatory of a synthetic 'conceptual' condition, meta-historical, and at the same time constitutive and bearing of the architectural project. The latter, in fact, through an 'eidetic' procedure, would be able to determine a 'modification' - conceived as a conscious act of being part of a pre-existing whole - of the things state through the recognition of structural rules and the 'construction' of a settlement principle which is coherent with the settlement vocation of the environment hosting the project itself. Based on this assumption, the paper intends to analyze the critical cogito at the basis of contemporary design experiences which, although seeking a new 'order' - as the constitutive law of the planned 'form' - have recognized the 'rule' which is implicit within the 'resistant natural matrix' of the landscape.

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The Spatial Logic of the Arabian Coastal City: The Case of Doha, State of Qatar and Muscat, Sultanate of Oman

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Keywords: *development, metropolitan, space syntax, topography, urban*

Abstract

The paper presents a comparison of two metropolitan regions on the Arabian Peninsula: Doha, State of Qatar and Muscat, Sultanate of Oman. Doha and Muscat possess many similarities for their climate (arid, subtropical desert with low rainfall and hot, humid summers), contemporary population (1.7-1.9 million) and metric size (650-720 km²), and historical/cultural origins as coastal settlements. Rapid urbanization and globalization also characterized Arabian cities in the late 20th/early 21st century (Salama and Wiedmann, 2012). However, topography represents a sharp contrast between them. Flatlands with an emergent coast characterize Doha whereas there is a rugged coastline and mountainous terrain in Muscat. The research in this paper controls for axial size (i.e., number of streets represented as lines of sight) in the modeling of the metropolitan regions for the sake of comparability. Previous space syntax research controlling for axial size in this manner was useful for bringing to light some clear morphological distinctions in the urban spatial network of different European and American city centers ("Author", 2015 and 2018). The paper argues in these two cases differing topographical conditions led to the adoption of distinct strategies for tailoring spatial structure with urban growth in Doha and Muscat over time. During urban expansion, this was necessary to resolve Hillier's paradox of centrality and linearity with increased physical size (Hillier, 1996; "Author", 2018). Quantifying the morphological characteristics of Doha and Muscat using space syntax helps to deepen our knowledge about these two cities, and perhaps others, on the Arabian Peninsula.

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Borgo Taccone. From the fragment to the weave

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Keywords: *borghi rurali, progetto urbano, riforma agraria*

Abstract

Gli studi sulle bonifiche insediative del Novecento sono soprattutto focalizzati sui casi celebri del Ventennio e sul ruolo dei maestri. Poco si indaga sulle questioni architettoniche della Riforma agraria, ai quali è dedicata questa proposta riguardante le bonifiche apulo-lucane ed in particolare il caso di Borgo Taccone, vicino Matera, costruito negli anni '50 lungo un antico percorso della transumanza che collega Potenza a Bari, mettendo in contatto Tirreno e Adriatico. Si tratta di uno degli interventi di maggiore portata elaborato in Basilicata in quegli anni. Del progetto originario di Plinio Marconi, che prevedeva un nucleo urbano rurale in grado di accentrare a sé le case coloniche sparse, fungendo da cerniera territoriale per le nuove strade poderali, sono state realizzate solo le case attestate sui percorsi matrice e i luoghi collettivi del lavoro, dell'aggregazione e della preghiera. Un tessuto episodico e irrisolto al quale è stata dedicata una Tesi di Laurea in "Architettura e Patrimoni" presso il Corso di Laurea in Architettura dell'Università della Basilicata, seguita da chi scrive come correlatore. Un'esperienza didattica che ha avuto l'obiettivo di far confluire i tratti essenziali scaturiti dall'analisi in una proposta progettuale che recuperasse le preesistenze all'interno di un generale riassetto morfologico, coerente alle necessità contemporanee di far rivivere il borgo, oggi abbandonato, come nucleo rurale policentrico. Un progetto di aggiornamento critico in cui i caratteri insediativi e spaziali sono il risultato di una rinnovata riflessione sul tema della città di fondazione, espressa attraverso una strategia interscalare che riassume il legame problematico tra preesistenza e nuovo, dalla struttura del tessuto al sistema poderale, dalle scelte tipologiche all'articolazione degli spazi esterni.

Il sostrato curvilineo.

Dal fenomeno della dequantificazione alla deformazione del tipo.

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Keywords: *Sostrato, morfologia urbana, deformazione*

Abstract

Cosa è la “deformazione della forma” (Borie e altri 2008)? E quale è il ruolo della deformazione nel rapporto tra la nuova costruzione e il contesto in cui si inserisce? Lo studio della città è lo studio della forma urbana attraverso la lettura della gerarchia dei percorsi, dei tessuti e dei caratteri degli edifici, che compongono la grammatica della forma, in una processualità intesa come un avvicinarsi di sistemi di strutture susseguenti nel tempo (Caniggia 1963). Queste strutture sono in ogni fase del processo formativo esse stesse sistemi di “forme urbane” giacenti che influenzano le susseguenti, deformando il costruito attraverso un sostrato resiliente (Strappa 2016). Il tema della deformazione e dell’adattamento al precedente vengono analizzati in questo studio attraverso l’azione urbana della dequantificazione dell’edificio speciale: gli stadi, i teatri e gli anfiteatri romani sono divenuti il sedime resistente che ha influenzato la formazione del nuovo tessuto. La deformazione del tipo e le varianti che si formano su – e dentro – questi edifici curvilinei nel tempo trovano negli studi di Kandinsky e Klee sulla forma circolare e sul suo rapporto con quella lineare un nuovo termine di confronto e di conferma degli studi morfologici sulla forma urbana e sul ruolo del sostrato come elemento non solo di “resistenza” ma di interpretazione e trasmissione della forma.

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Permanent substratum structures of the Upper Lazio territory.

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Keywords: *Upper Lazio, typo-morphological reading, permanent substratum structures*

Abstract

The study addresses the topic of the permanent substratum structures of the Upper Lazio territory that have been reconstructed using the method of the "typo-morphological reading" of the Muratorian school. Upper Lazio is the historical region that extends north of Rome, located between the Tiber and the Tyrrhenian Sea. Usually identified with the name of 'Southern Etruria', this area is of crucial importance for the comprehension of Etruscan and Roman old roads. Originally set on ridge paths and subsequently based on the typical radial straight lines converging on the Palatine Hill, the road system had been adapted following Roman planning interventions; even today it affects the urban and extra-urban viability. Between the 60s-70s, the first researches on Upper Lazio highlighted the potential of the studies related to the long-duration anthropization processes and the understanding of ancient landscapes. However, several questions are still open regarding the original places of the most ancient Villanovan populations, the first settlement structures and the tracing modes of Roman planned systems. After a historical and geographical overview, this contribution aims to read the substratum formation phases which are essential to understand the Upper Lazio current configuration.

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The form and the space of the Venice's city

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Keywords: Venice, historic city, morphology, space

Abstract

The city is a "system of connection": a set of relationships between the building typology and the urban morphology, between the positioning of the monuments in relation to the fabrics, between the discipline of the plan and the need to give form to places and spatial quality of contexts. This "system of connection" is evident in the *historic city*, which it's structured through the formation of dense and compact "fabrics" and it recognizes its element of formation in the concept of "urban block". The paper aims to show an experience of research activity at the RWTH Aachen University started from the *reading of the urban forms* of an extremely singular city such as Venice. Through codified tools of urban analysis and the most recent spatial reading tool of the city - fundamental to understand and define the reasons of architecture project - it's possible to understand the morphology of Venice, characterized by a dense and uniform fabric, in which the only open spaces are the "*campi*". A careful consideration also identifies an extremely articulated urban fabric of Venice: many are the "primary elements", such as the great religious complexes and prestigious buildings, which represent the "catalyst" of the historic Venetian fabric. Recalling Schröder's studies, for which the urban form is examined in its spatial value, measuring the degree of internality or externality that characterized the spaces of the city, Venice, historical city, is the emblem of the city made of delimited and compressed spaces, and of interior's spaces.

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The re-invention of the fragment. The Archeological Museum of Milan by Egizio Nichelli

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keywords: *Fragments, analogy, reconstruction, ruin, Milan*

Abstract

The project for the Archeological Museum of Milan by Egizio Nichelli presents itself as a pretext to talk about the creation of an architecture in a stratified context. Nichelli designs in the historical fabric, where the bombings of 1943 left urban voids. In front of the former Major Monastery block he recognizes in the destruction the opportunity to rebuild the shape of this fragmented reality. With the search for the *essential idea* Nichelli chooses the cloistered type as an appropriate compositional principle for give order to the fragments. Following this method, based on the *analogy*, Nichelli attributes to the correspondence between the new and the old the role of referee in the composition of the site. According to that the court loses a side where the roman remains emerge as a memory of the past, while the new side of the court, parallel to the Church of San Maurizio, recovers its lying and dimension. On one hand the choice of a fixed principle extracts architecture from time, but on the other, the language confirms its belonging to a historical period. As a matter of fact, Nichelli made his own the lesson of Perret and Le Corbusier of the reinforced concrete frame construction. The architect proposes a *plan libre* with a pillar structure that allows him to have a *façade libre* with *fenêtre en longueur*. Despite this, the outcome shows how this architecture give depth to time instead of anchoring itself to the idea of an absolute present, immobile and self-referential.

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The city of walls: how military architecture has shaped Baghdad and the citizens

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keywords: *urban configuration; walls; Baghdad*

Abstract

Starting from an overview of "The Magnificent Baghdad" the narrative of "A thousand and one nights" tells the story of a city of controlled spaces embodying an artificial construction. The history of the changing urban and social construction can be read taking the walls as reference objects that can explain how the configuration of the city was reshaped after the conflict. As an architectural manifesto of the city, the wall has assumed different functions hiding different meanings that had contributed to the evolution and remodeling of the city and the society. Having this object as a guideline, the focal point will be the comprehension of the main reason that leads to adopting a walled city in modern time. From that, several questions will emerge from both sides: urban and social. The wall itself is just an architectural element but the use that men made of it can lead to different purposes: if on one side can protect in the other can divide. Struggling with the emerging context of Baghdad how the presence/use/imposition of the new walls are affecting the citizen and the urban configuration of the city. What is the reaction on a policy of invasion led by the wall and how the changing of urban configuration changed also the use of the space? Moreover, the subtext takes into consideration the effect of the walling policy in the sectarian conflict and the peace bring promoted by the US maintaining a direct relationship between urban change and political choice

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Layered Morphologies and Topographic Structures. Substrata and Design Writing

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keywords: *layered topo-morphology; assemblage; topographic forms; architectural rewriting*

Abstract

Considering site as a 'tabula plena' rather than a 'tabula rasa', design is in no case the colonisation of a void but rather a new writing on an existing text, often miscellaneous, that requires to be read, interpreted and consistently continued. This knowledge posture deriving from the Italian tradition of urban studies and urban architecture manifests a tendency towards continuity that, although manifold and originally in either opposition or in continuity with the Modern Movement, firmly relates architecture to the meditative thought which produces advancements through a continuous reflection on previous ideas and physical 'substrata'. After establishing an 'urban science' based on the typomorphological bi-univocal relationship, analogic transpositions in urban discontinuity, *città per parti*, and first inquiries in the territories of topologies, present interpretations underlying the notions of layered palimpsest, stratigraphic readings, substrata reinforce a tendency in which architecture and the city are mutually defined. The concepts of layered morphologies and topographic structures form a conceptual device that challenges the condition of the city as assemblages of assemblages, operating on the degree of integration or dispersion of its components, the decoding of latent structures and traces, the readability of morphologic-semantic units and rewritability of superior-grade figures. In Chinese contexts, where historic space is often the space of latency under multiple incoherent texts, simply juxtaposed, the hermeneutic work of decoding and recoding acts as a carrier for constructing a contemporary cultural relationship with the site by stirring a multiplicity of meanings and resonances that enriches both situated memory and the narrative introduced by the new work. Advancing critical theoretical propositions while verifying their operational tool through research-based case studies, the paper explores some principles for reading, decoding and interpretative rewriting in multi-coded compromised Chinese historic sites: re-signification, re-structuring and re-morphologisation.

From open architecture to the dialectic podium/temple. For a con/textual architecture

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Abstract

Open architecture interprets a procedural condition of the project, in which it loses its formal finiteness in order to prioritize the plant mechanism that allows it to accept the open modifications that can occur over time.

This reduces, however, the textual relevance of the architectural apparatus which, in reverse, is recovered through the dialectic *podium/temple* dichotomy, in which the first term expresses the physical correspondence to the contextual conditions, while the second refers to timeless and representative values of which a architectural product must take charge in order to affirm its own temporal permanence.

Place Royale: A HERITAGE TO REDISCOVER.

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Keywords: Vaults, archeology, restoration, urban morphology

Abstract

Place Royale experienced an extensive restoration project in Quebec City's Lower Town, largely carried out between 1970 and 1985. The evolution of the built space relied mostly on architectural sources while the archaeological excavations and findings were considered sites' specific information. The old masonry structures, the old cellar levels, the dating of the foundations of almost all the buildings, were recorded, yet unfortunately often ignored.

Forty years after this restoration, this urban ensemble, managed by SOCEC, an agency of the Government of Quebec, is facing major maintenance work. This situation inevitably leads to multiple questions regarding the nature of restorations 50 years ago.

The study of the vaults makes it possible to understand the foundations, both figuratively and literally. After consulting 18 archaeological reports, dating over more than 9 years of research in these historical structures, we realised that no overall plan was ever produced.

Thus, this presentation explores the morphological characteristics of vaulted cellars present in this historical urban residential space. It illustrates their intrinsic characteristics and their evolution over time. The study of archaeological reports enlightens as never seen before the fundamental characteristics of the vaults, confirming that the current ground level is 1m higher than the original one. Place Royale's earlier street levels stress the original residential character of the houses, questioning the commercial vocation imposed on this historic district since 1980.

This analysis opens a new perspective on the restoration objectives of the unfinished project. It informs historians about the material evidence and offers to architects and managers about the morphological characteristics and the relevant functions. This study sheds more light on what can and cannot be done about Quebec's historic, ancient and modern heritage.

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Public Space in São Paulo: The fair as a form of urban land occupation

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Keywords: *Consolidated urban territory, public space, temporary appropriations*

Abstract

In the contemporary scenario, by recognizing the city as a result of a historical process, it is possible to understand how public spaces are essential to the development of this territory, as spaces of plurality that enable appropriations and several human manifestations. Therefore, public spaces can potentially ground public and social urban life. The objective is to comprehend the usage of urban public spaces in a consolidated urban territory, and to investigate how ephemeral appropriations may redefine the public space's meanings, uses, and perceptions. For this, it was defined as a research object the Bexiga neighborhood, at a macro scale, and the Dom Orione Square and its fairs, as a local approach. Bexiga, located near the downtown, is part of a process linked to the Brazilian coffee economy of the 19th century, receiving Italian immigrants and freed slaves. In spite of the urban modifications experienced throughout the 20th century, Bexiga maintains the peculiarities of tracing and parceling land, as well as the buildings. The recognition of its importance as a historical and cultural heritage occurred in 2002. The study analyses the territory, the Antiques Fair, the Jardim Secreto Fair and the transformation of the square's environment through those. In summary, the temporary appropriation of a public space alters the place and stimulates the use of this area and the surroundings, influencing the urban dynamics. Also, the process enhances this site as a place of social coexistence and stimulates new experiences and perceptions of space.

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Regeneration of sanctuaries in ancient cities: Pergamon example

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Keywords: *Mother Goddess cult, sanctuary, urban regeneration, Pergamon*

Abstract

The generation of sanctuaries in ancient cities in archaic era was generally based on an origin of a specific cult. There were numerous sanctuaries devoted to the Mother Goddess cult which is common in Anatolia in the relevant era. Those sanctuaries were extended and regenerated when they became more important. Pergamon is an important example in this term. Mamurtkale Kybele Sanctuary locates in a place close to Pergamon. In this sanctuary which is thought to have a ritual path connection with the city people started to worship the Mother Goddess from 5th century B.C. The sanctuary was extended and regenerated after it gained importance. At the first stage, there were an altar and a pedestal where the sculpture of God was placed in this sanctuary. In 3rd century B.C., a monumental temple containing the pedestal from earlier dates and a new altar surrounding the older one were built. New buildings related to the relevant cult and the needs of the people visiting the sanctuary were continued to be built along with the temple. A sanctuary devoted to the Mother Goddess not only created an important focal point which have strong natural relationships, but also turned into a built-architecture in time. Contrary to the sanctuaries in the city, an example of a rural sanctuary created an urbanization around itself. With this study, regeneration of the sanctuaries consisting of natural factors and the urban substrata constituted through its transformation to a structured architectural design were addressed and it was aimed to contribute to the relevant research field in this term.

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The Country Magnet – Garden Cities' aesthetic background

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Keywords: *Garden City, Urban and Rural Landscape, Rus in Urbe, Town Planning*

Abstract

Since the beginning of the Garden City Movement, the British countryside represented the opportunity to create a model society, what led to carry on the aesthetic and philanthropic tradition of building model townships in rural settlements, with the addition of some urban patterns under the practice of '*rus in urbe*'. During the early eighteenth century, that practice was developed by many aristocrats and architects, who implemented rural features in the heart of cities, such as redefining the English country house and its gardens to create discrete upmarket environments. In this way, several cities like London, Bath or Edinburgh threaded this green yarn to mend the gaps between their urban fabric and their surroundings, upgrading not only their urban landscape but also triggering the re-imagining of town planning. In parallel with urban developments, significant rural landowners and industrialists rose new communities in the countryside to re-settle their employees in an idyllic environment close to their workplace. From the model village of the eighteenth century, until the industrial village of the late nineteenth century, the rural landscape was the testing ground of aesthetes and philanthropists worried about the decay of social reproduction within cities. This work is a journey through a historiographical and morphological analysis of British cities, towns and villages, which gave rise to the evolution of the first garden communities' urban form, by combining urban and rural patterns, as well as sowing the seeds of the Garden City Movement and the beginning of the town planning practice in western civilization.

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A Green Legacy: the Transformation of 18th Century Parks into the new British Universities of the 1960s

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keywords: *British Universities, campus, New Universities, landscape, University cities, 18TH century parks, heritage landscapes*

Abstract

The need to expand the access to higher education in Britain after World War II led to the extension of a number of existing colleges and to the creation of seven new universities within a 250 Kilometer radius around London. Since the financing body, the University Grants Committee, asked for these new universities to be on the outskirts of existing towns -to allow for expansion- and to provide a site of at least 200 acres (around 80 hectares), many promoting committees resorted to existing 18th century parks, which were no longer profitable as agrarian estates or had become too close to the urban realm. In their academic programmes, the new universities aimed at breaking with the past with a multidisciplinary approach that was reflected in its ground-breaking architecture. However, the fact that the university sites were frequently 18th century parks with mature tree structures was acknowledged quite differently by architects and landscape designers in each case. This paper will explore how the 18th century parks were transformed to host a new use, a larger scale and a higher density, analyzing which features were retained and what role these inherited landscapes assumed in the overall image of the new universities.

Mapping Urbanities. From morphologies to flows a new reading of Public Space

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keywords: *Mapping Urbanities, Morphology, Flows, Public Space*

Abstract

What is the capacity of the built space mapping to reveal the forces at play responsible for the shape and modelling of urban space? How can mapping urban phenomena extend our capacity to imagine space and therefore the possibilities of urban transformation? Starting from the ranks of theoretical thought to the study of “human/urban behavior” set by Jacobs (1961) and Gehl (1987) up to the exploration of built space at different scales of detail, the research intends to explore the power of mapping urban phenomena as a method of investigation that opens new horizons in the exploration of complex urban environments. Urban mapping is, in fact, a form of spatial knowledge production that embodies a spatial logic that cannot be reduced to words and numbers. Rather, it allows the building of interconnections between the ways in which the city is perceived, conceived and lived; and it can reveal multiple urban transformation capabilities by defining the city as a new space of possibilities. A focus will be placed on the study of urban morphologies and flows within the city by analyzing different case studies where the understanding of the city is focused on identifying the relationships between places rather than on places in themselves; on transformations rather than fixed forms; and on the multi-scale relationships of built space. The mapping of the urban structure thus becomes a research tool, a practice through which we obtain a deeper understanding of how the city works and how it could be transformed through urban planning and design.

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Volumes of the past, lines in the present. Ouzai square, on the traces of the invisible streetscape of Beirut

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University, Acronym of the afference department - Full name of the afference department, city. (Font Century Gothic, regular, 10 pt)

Keywords: *Invisible, streetscape, volume, line, imagination*

Abstract

Beirut, capital of Lebanon, had an extraordinary boom in construction after the civil war from 1975 to 1990. Lebanese and, above all, internationally renowned landscape architects have contributed to the creation of new landscapes under the control of Solidere, a private company that has appropriated all the historical center of Beirut.

Among these new developments, let's mention the project won by Martha Schwartz and Partners.

It is about an open space at the southern entrance to Beirut Souk: Imam Ouzai Square, also known as Zawiyat Ibn Iraq Square in reference to the present monument. Martha Schwartz, through her design tries to put in front the past history of the city. In order to create continuity with historical landscape through contemporary design, the main idea was to highlight the buried old Roman pavement, into lines in the floor surface of the current square. Thus, Ouzai square appears in the traces of the invisible streetscape of Beirut.

From parameters identified by spatial and social approaches we tried to uncover:

What is the interest of this intervention at the spatial level? What contribution do these lines offer to the streetscape? How can an invisible volume be read from a visible line?

What is the interest of this intervention at the social level? How does a simple line become a tool for creating continuity? How does this intervention allow people to imagine, care, defend and be curious about the landscape? How does this intervention contribute to the creation of their landscape?

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Research on public space of urban historic area in Nanjing based on Nolli Map

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Keywords: *historical fabric, public space, Nolli Map, spatial analysis*

Abstract

Giambattista Nolli in 1748 published the large map of Rome, which clearly and accurately depicted the form and system of public space in Rome. The graphic presentation has proved to be a powerful tool for urban space research and design. Lots of researchers have drawn Nolli maps of different cities, such as Venturi's Nolli Map of the Las Vegas Strip and Obadia's Boston Nolli Map based on GIS tools, by analyzing and applying the principles of Nolli Map. However, due to the more abundant types of contemporary urban space, the more diverse functions of public buildings, and more complex definition of public space, the application of Nolli Map drawing principle to contemporary cities is still a question.

Taking Nanjing historic area in China as an example, this paper investigates the graphic method of contemporary urban public space based on Nolli Map. By comparing the means of transportation, traffic flow, relevant regulations, building functions and other aspects, this study identifies and depicts which outside space and inside space of buildings can be incorporated into the public space system. This study also breaks through the limitation of the traditional two-dimensional Nolli Map, and discusses public space from three-dimensional level. Through the map of public space of Nanjing historic area, the spatial structure and characteristics of public space are analyzed. The results show that Nolli Map can be applied to historic area in China, and it also provides an effective tool for urban designers and architects to depict and analyze contemporary urban public space.

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Emerging Perspectives on Urban Morphology: Nicosia's historical urban form through multiple practices

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Keywords: *urban form, combined approaches, urban segregation*

Abstract

The 'Emerging Perspectives on Urban Morphology' / EPUM research project brings together five partners from different countries in South and Central Europe that have been promoting different morphological approaches aiming at comparing the theoretical, conceptual and methodological basis of the different approaches, identifying their main strengths and weaknesses, and exploring the possibilities to combine some of these different ways of describing, explaining and prescribing the physical form of cities.

Within the theoretical framework of EPUM, this paper aims to develop the line of research launched by Kropf and further explored by Oliveira and Monteiro. A critical analysis of the concepts underpinning three dominant approaches is undertaken, outlining a combined view in which the different approaches can support each other to provide a better understanding of urban segregation through time, in one case study, the historic centre of Nicosia (Kropf 2009). A key concept in three of these approaches (historico-geographical, process typological and spatial configurational) is chosen and then applied. The main points of contact between the different approaches are identified and a methodological approach is proposed. The benefits of relevant methodological tools are reviewed and, based on the requirements of the theoretical framework they are selected and combined.

The attempt to find a common ground proves to be a challenging task; but the knowledge of the strengths and the weaknesses of each approach may enable us to select the most appropriate options given the specific nature of the object under study, fostering a more holistic and integrated approach to urban segregation studies.

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From past to present Shiraz historical texture and its morphological structure

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Keywords: *Change of cities, Iran, Shiraz, Historical context, morphological structure*

Abstract

The change in the structure of Iranian cities after the transition from Sassanid to the Islamic era caused new urbanization in Iran that had significant differences with previous urban planning in Iranian urbanism. Iranian architects who used a systematic and geometric structure for designing the city before the arrival of Islam into Iran defined a new morphology for establishing the city. The change made in the Iranian cities was not limited to changing the position of the cities, but also significant changes in the structure and social classes of the cities.

The city of "Shiraz", originally located at the present castle of "Abu Nasr", was different from other cities that built by Sasanian architects. The city of "Darabgerd", "Goor" city, "Bishapur" city, which is a prime example of pre-Islamic Iranian urbanization, has been designed and built on the basis of the Hippodamus system. While post-Islam cities are based on organic systems.

In this research, which is based on studies on the historical context of Shiraz, Iran's urban planning system has been compared with the pre-Islamic urban planning system. Based on the information obtained from this research, it was found that the structure of the city of Shiraz was based on the unit by unit design and with predetermined planning.

This research shows that the change of the city in Iran has been done only in its formal form. And the physical structure of the city continues to follow the structure of the Hippodamus system.

The research method in this study is comparative - analytical. Practical and library methods are used to collect data. The result of this research can help in achieving the principles and design parameters in the historical textures in Iran

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Historical walls of segregation: a comparative approach on fringe belt as a tool of regeneration

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Keywords: *Spatial segregation, Fringe belts, Identity, Regeneration*

Abstract

Spatial segregation is an inherent feature of cities and makes itself evident when historical walls together with fringe belt highlight a tangible boundary dividing the built environment. The fringe-belt concept, first formulated in Germany some 50 years ago, has its origins in the recognition by Louis of the long-term significance of physical limitations on urban growth, notably city walls. Developed by M.R.G. Conzen and the urban morphology school of the University of Birmingham, it describes coherently the urbanization process and change of status of areas from limits to central zones during the building cycles towards the periphery. Fringe belts are usually substrata and green corridors which also have tourism potential and importance in terms of the tradition, memory and sense of permanence, especially if they embedded the city walls. With the aim of enhancing the impact of the urban morphologies concepts on the regeneration and planning practice and overcoming the current alienation of such structures within the urban fabrics, this work offers a comparative investigation between fringe belts of Verona and Nicosia. Analysing and comparing their historical, environmental and social effects on the city, a more general framework of the real and symbolic significance will be provided. For guaranteeing a more inclusive and sustainable city development, these key areas should be taken into consideration as ecological buffer zones of identity in urban planning and design processes and should have enforcement on decision makers.

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Morphological development in historic context German Convent of St Francis

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keywords: *architecture heritage sustainability*

Abstract

German Convent of St Francis of the nuns in Reute Bad Waldsee in Germany is undergoing the demographic shift typical for convents in this day and age whereas 30 years ago the convent had over 600 nuns and has over 28 buildings that formed half of the entire village in the South of Germany. The convent has now a mere 289 nuns left and will in ten years only have 28 nuns due to the aging nun population. The attraction to join a convent and the role of religion in our society has changed and will keep changing. The architectural and urban design challenge hence to repurpose the complex in a manner to maintain the core values of the convent, ensure safe-keeping the history of the convent and creating a new center for the community. Following a historic, archaeological and assessment of the future requirements of the convent and the community, it was decided to convert the complex in a manner to form a new center. Making it attractive to be there and filling the complex with life. The project is phased over ten years first to establish the core of the historic convent in the heritage listed building, reducing the over 12 churches in the complex to 3-4 and ensuring a sustainable transition of the current religious buildings in a multi functional use complex, with a pilgrimage, café, hotel and NGO foundation headquarter, allowing to remove some buildings to form a new community place for people to gather and enjoy being in this historic complex. The architectural challenges were that no accurate plans existed of building nor the several underground connecting tunnels that crisscross the convent hill. The design and construction in a historic context and revitalization and contemporary demands on sustainability and economic efficiency became the design parameters to enable future proof project. This project is phased and will be translated over a period of ten years. I act as consultant to the convent as a guide in the development and in the hope that this initiative can provide a role model for other convents and monasteries in Europe.

Diyarbakır. City Identity changing through time.

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Keywords: *City walls, castle town, Inner Castle*

Abstract

The section of the old city of Diyarbakır, surrounded by the historic city walls is called Diyarbakır “Kale-Kent” (Citadel City) or “Suriçi”. Accordingly, any examination (study) of the settlement tissue of the citadel must include the surrounding walls as an integral element of that tissue. Because that tissue which has survived the past 5000 years, was protected by these magnificent city walls. Apparently, location of the citadel in that area place (its existing location) is not accidentally. This was the right place, according to the settlement strategies. The old city of Diyarbakır is placed in the upper middle section of an area known as the “Fertile Crescent”, which covers some 450-500.000 square kilometres, stretching from the Nile Valley in Egypt, in the South, Northward, towards Jordan, Palestine, İsrail, Syria, including part of South-East Anatolia and lands in Mesopotamia until Basra Bay, (because as a form of a crescent-hence) it was named “Fertile Crescent”. This “Fertile Crescent”, is the geographical “belt” which accounts for “firsts” of vital human existence:

It was in that fertile belt that humankind has moved from nomadic life to settled life.

It was in this belt that settlers lived, in shelters designed and built by themselves instead of living in makeshift shelters.

It was in this belt that first villager and cities appeared; animals domesticated; vital wheat and barley cultivation and seed improvement practice was realized.

Il concetto di “tipo del trullo” nella formazione dell’insediamento di Alberobello

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Keywords: *tipologia edilizia, tessuto storico, coscienza critica, coscienza spontanea*

Abstract

Il tema proposto è il risultato di una ricerca eseguita all’interno del Laboratorio di Tesi di Laurea promosso nel Dipartimento Dicar del Politecnico di Bari. Lo studio approfondisce la formazione della città di Alberobello, sito Unesco collocato nello scenario della Murgia dei Trulli, e analizza i caratteri dei tipi edilizi presenti nella perimetrazione della zona monumentale. La ricerca di Laboratorio si è concentrata, in particolare, sul “concetto” di tipo del trullo largamente diffuso nel costruito storico della città, nei due sistemi insediativi iniziali - Rione Monti e Aia Piccola – separati dall’antica foggia, oggi Largo Martellotta.

Tale tipologia, originariamente nata per soddisfare esigenze legate all’attività produttiva-agricola, è mutata nel tempo generando differenti modalità strutturali, sia nella configurazione dello spazio ad uso domestico, sia nel rapporto tra più unità base aggregate in serie su un percorso o su un’area comune a configurare il “vicinato”. Lo studio analitico delle unità edilizie presenti ha permesso di ricostruire un abaco che comprende i tipi portanti e le varianti sincroniche e diacroniche. Il riconoscimento delle diversità tipologiche è stato utile anche per una ulteriore indagine: la ricostruzione delle fasi di formazione del tessuto costituito da nuclei aggregati spontanei e pianificati. Con l’approfondimento sul carattere del tipo del trullo con copertura a pseudo-cupola a forma di cono è stato identificato il “concetto di casa” vigente in quel tempo e in quel luogo determinati, costituito da un vano principale destinato alle attività giornaliere e due piccoli spazi: l’alcova, riservata al riposo notturno, il focolare per la cottura dei cibi. A partire da questa configurazione elementare sono gemmate alcune varianti con l’aggiunta di ulteriori spazi, spesso coperti anch’essi a trullo. Ne consegue che l’unità abitativa, nello stato di tipo odierno, mostra a volte configurazioni complesse ottenute dal raddoppio della cellula elementare con l’aggiunta di ulteriori spazi.

Lo studio proposto intende dimostrare l’efficacia dei risultati ottenuti impiegando lo strumento dell’analisi tipologico-processuale nel riconoscimento delle strutture antropiche, base fondamentale per avviare un progetto di recupero del tessuto pensando anche alla sua possibile/potenziale congruente trasformazione.

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Gravina in Puglia: City substratum as a Process of “Invention” and Transformation of the Territory

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Keywords: *Gravina in Puglia, caves, Historical context, Urban Morphology, cave habitat*

Abstract

The city of Gravina in Puglia owes its name to its peculiar geomorphological position, presenting itself as the city of the “Gravina and the Caves in the Gravina” (città dell’ “Gravina e delle Grotte nella Gravina”). The *locus-urbs Gravinae* is witness of the passing of time, in an incessant succession of civilizations since the ancient Paleolithic, although the sure sources date back to the Neolithic, around 5950 B.C. In its territory, where nature and the work of man represent an inseparable binomial, the caves and the ravines of the “grande baratro” (Botromagno) have been modeled for the needs of everyday life, giving life to the rock habitat. The cave was occupied by man and made refuge, dwelling, place of worship or burial. Prehistoric dwelling then resumed in medieval age, in an era pervaded by uncertainty and vandal invasions in which man felt the need to re-find a safe place, the old abandoned dwelling. History arises as a continuous transformative process in which man, changing his needs and habits, transforms his native place, making it more “anthropic” and less “natural”. The aim of the research is to propose a historical procedural study of the evolution of the *gravinese* rock habitat and of the same *civitas*, from the primitive caves to the cave-houses (*domus criptae*). Parallel to this progressive typological evolution, it is noted that the tuff from a simple natural casing becomes a building material used for the weaving of wall perimeter, the basic element for the following *palatiatae houses*.

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Borgo of Chiaravalle Milanese: project tools and strategies for the recovery and protection of the historical center

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Keywords: *urban regeneration, analysis, urban form*

Abstract

The southern area of the city of Milan is characterized by a strong agricultural connotation which is shown by architectural and natural episodes cut off from each other, practically devoid of their own meaning and not related to the environment they belong to. Chiaravalle Milanese is a clear example: a medieval town developed around a Cistercian Abbey and its farmstead, crossed by historical irrigation canals or special hydraulic elements such as dams or mills, that give evidence of the local agricultural culture. Nowadays, this landscape presents itself as being separated by disused railway tracks, characterized by inefficient services and a want of public areas for the community, marked by a shortage of green spaces, commercial activities and cycle tracks or pathways, as well as being cut off from the rest of Milan areas and suffering from a considerable urban decline ⁽¹⁾. From the reading of the characteristics of the area, a cross-sectoral analysis ⁽²⁾ has been carried out to define objectives and strategies, such as the enhancement of the agricultural culture through the promotion of a short-chain production in which the farmstead Grangia may regain its central role; the recovery of the main square historical identity has been planned thanks to the introduction of shops and the offer of educational and nature walks. This project is meant to actualize the productive experiences of the past, in relation to analysis ⁽³⁾ which takes into account the economic and environmental scenario, as well as the social and cultural background of the town.

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Urban form versus health of citizens. Case study of Lodz downtown rehabilitation.

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Keywords: *urban health, typo-morphology, rehabilitation*

Abstract

Urban form affects citizens' health in numerous direct and indirect ways. The current paper focuses on the relationships between urban health and forms of urban structures. The goal is to identify the criteria for the evaluation of physical forms, such as forms of streets and open spaces, the presence of green infrastructures (GI) and density of built structures.

First, the positive impact of urban greenery on citizens health has been proven by numerous research (Elmqvist et al. 2013, Bowler et al. 2010). Greenery reduces local temperatures due to evapotranspiration, provides shade and reflects solar radiation. At the same time, it absorbs air pollutants (Hartig et al. 2014). Parks, gardens and street vegetation reduce noise levels, offer space for physical activities and social life, reduces stress and helps to relax (Marselle et al. 2019). Other positive health impacts are related to water management predicaments, either in the situation of flooding or water deficits, which both worsen due to climate change. Moreover, vegetation contributes to buffering climate change risks.

Second, forms of streets and open spaces, including the availability of infrastructure for various modes of mobility, the share of open space in the built environment and the densities of the latter - all this contributes to the shaping of individual lifestyles and impacts both healthy environment and the quality of life (WHO 2014, Thomson, Newman 2018). The current paper uses the qualitative and quantitative assessment and typo-morphological approach to evaluate the rehabilitation strategy and ongoing transformations of the downtown of Lodz, Poland.

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Rethinking marginal areas: urban growth and inequality in informal settlements, the case study of Usme district, Bogotá.

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Keywords: *Housing, informal settlements, ecological structure, urban development*

Abstract

The aim of this research project is first to find out the values lying behind the logics of the urban growth regarding the social and spatial aspects in one peripheral area of Bogota city. Second, this project aims at formulating effective criteria to intervene those informal settlements in the southern areas in Bogota. This paper will review different factors that cause great impact in the urban growth of the marginal outskirts in the southern area of Bogota city. Among many factors that affect urban growth in marginal areas in Bogota, I will find out the values behind the logics of urban growth and its dynamics in marginal areas in Bogotá city. The contribution of this research project lies on the applicability it might have in other urban informal settlements in the world. The research methodology used to find out the singular inherent features of a marginal area can be replicated so as to find the present values in those communities and territories. By having in mind those values when designing e.g. public policies for urban development, it would be possible to intervene those marginal areas in a comprehensible, non-imposing way. As a result, those marginal communities would have better quality of life conditions. This would be a huge leap towards a more sustainable urban development process not only in marginal areas but the whole Bogotá city itself.

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Morphological layers in Bucharest based on the spontaneous interior courtyards

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Keywords: *Bucharest, interior courtyards, spontaneous city, voids in morphology*

Abstract

This paper traces the beginning of the urban development and the processual analysis of the historical tissue of Bucharest with its spontaneous urban transformations and structuring urban design. The base of this analysis is an urban form not specific for the basic building type in Bucharest, but developed during the urban process or borrowed as a model: the interior urban courtyards formed in the commercial core-centre in *Calea Moșilor (Moșilor Street)*. These hidden places of the ordinary city are in-between spaces soon to be dissolved in the contemporary city, replaced by the object-made architecture.

Based on the muratorian Typo-Morphological School of Urban Planning in Italy, and its continuity within the theories of Cannigia, the method demonstrates the mixed historical layers, short-time over-layered regulations and urban transformations, formal and informal activities in the city, some of them unaltered and exposed in those urban voids. We dissembled the historical maps, and examined the urban-planning regulations as the base structure of the paper, in order to identify the interior transformations and typologies: from the inns' courtyards and parishes' open spaces, to resulted voids in urban blocks.

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A Gentrifying Pattern of a Global City. Case of Karakoy, Istanbul

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Abstract

Over the last decade, Istanbul has been experiencing a series of rapid large and small scale urban transformation processes and the city, as a whole, is being gentrified. This research aims to understand how the usage of city's spaces and the fabric of everyday life are changing, as a consequence of spatial concentration of urban tourism and cultural globalization, in the inner cities of Istanbul through a case study. In the historic inner-city neighborhoods of the city, which date before the 15th century, new consumption industries seem to originate changes in land use and in the building typologies through redevelopment and densification processes. Karaköy is the emblematic example used to understand the undergoing gentrification pattern catalyzed by free-market mechanisms that are benefiting from global trends. On the one hand, the study wants to show the before and after changes through comparative mapping in the specific area, on the other hand, tries to put in use the urban morphology as a tool to codifying non-spatial dynamics that are transforming the present urban territory. In short, Karakoy, Istanbul's selected inner-city neighborhood, serves as a microcosm to discover transiting morphological legacies and aims to become an agency through which gentrifying forms are codified as the new fragments of the contemporary city.

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The urban redevelopment project of San Lorenzo district in Rome

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keywords: *urban design, redevelopment, architecture, regeneration*

Abstract

The district of San Lorenzo in Rome, so called because of its proximity to the basilica of the same name, has a historical fabric and particular morphological and environmental characteristics. Built on farmland belonging to the bourgeoisie at the end of the 1800s, it attracted migrants who saw a certainty of work in the thriving building. At the base of the building, which took place without planning, there was the need to build cheap high-density dwellings for the working class, craftsmen and the people, taking advantage of the absence, until 1887, of a city building regulation.

In 1909 the Sanjust Plan provides for the completion but does not heal the degraded building fabric. During the Great War the war industry implemented the development of urban transport by rail and the urbanization of the land of Casal Bruciato transformed San Lorenzo from a suburban border into a transition area between the intramural city and the periphery. In 1962 the Master Plan provides for the construction of the East Tangenziale and excludes it from investments.

Today the social and structural conditions, the high building density with reduced road sections, the organic lack of greenery and services require a reorganization process.

The Urban Project of the municipality of 2006 identifies areas of valorisation, limited by building permeability and inhomogeneity. The Aurelian Walls, the Verano cemetery, the University City and the Rome Termini railway are strengths in the regeneration of the neighborhood that provides a connection to the areas of valorisation. The areas of intervention are: C10 - via de Lollis; C11 - Verano; D - bombed buildings; B7 - borghetto dei Lucani; C4 - Atac deposit

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Urban Morphological Forms of Informal Areas in Tirana; Strategies of Intervention

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Keywords: *Informality, urban morphology, landscape, territory*

Abstract

The last 30 years have been accompanied by many changes in the country including those of a territorial development character in Albania. The biggest interventions after the fall of the communist regime, result to have been done in the most important cities. In the new conditions of market economy, there was an intense demographic movement toward these areas, especially in the Durres - Tirana area, mostly due to their economic potential. Being not ready to handle the situation, the state failed in the control of demographic movement, and furthermore of the territory. The informality was developed very fast and was a wide spread phenomena. There were several morphological urban forms of informality developed within the existing city fabric, but also the new ones occupying new territories. Nowadays, these kinds of developments, spontaneously organized, have transformed many ex-agricultural and ex-natural spaces to a build environment. These areas do contain many problematics, mostly due to absence of different services, infrastructure, and furthermore lack of integration with the rest of the city. After many years, not much has been done for these settlements, which are legalized by now, and are "formally" an integral part of the urban area. This study aims to define the areas of informal settlements, define their morphological urban form, the morphology of the territory where located, and file their characteristics. On this important background possible scenarios of intervention would be developed with the only scope, that of emerging solutions for the regeneration and the integration of such areas of the capital city.

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Morphological legacies and informal city: understanding urban dynamics in the Vetor Leste do centro in São paulo

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keywords: *Informal practices, urban morphology, industrial dismission, cortiços*

Abstract

From the middle of the 20th century, the center of São Paulo began to undergo a deep urban transformation resulting from the transfer of the ruling classes to other sectors of the city. The related dislocation of higher-income housing, trade and services toward the southwest of the metropolis has left the city center in a social, economic and urban decay. The Vetor Leste do Centro, classified as the first industrial suburb of São Paulo, is the territory that has most being participated in the urban metropolitan process and it represents the privileged area where the sedimentation of ways to inhabit has produced continuous spatial modifications. Its intrinsic condition of centrality, as well as being the gateway for the Easter Zone of the city, demonstrates a series of historical and geographical conflicts of the Varzea Do Carmo's urbanization which confers the peculiar morphology to the area. Consequently, to read its tissue it means recognizing the sequence of each life cycles that the metropolis of Sao Paulo has experienced through its urban expansion, from its colonial period until nowadays. The analysis starts by recognizing, in the urban morphology, distinctive elements of typical industrial landuse. The criterion, that has been chosen as the driving guideline, is the spatial and functional modification occurred inside each urban block during the industrial dismission. The paper critically examines how the urban area of the VLC represents one of the most complex and perfect example for the comprehension of historical urban phases occurred during the construction of the metropolis within the city center and the eastern workers districts, presenting an interesting case for understanding how formal and informal practices has intervened in the production of the urban spaces of this large metropolis.

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A momentary lapse of reason

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keywords: *Urban morphology, urban form, town plan, Morpho*

Abstract

For thousands of years humankind has been living in cities. It has been a long process, involving some ruptures but mainly a continuous improvement of urban forms towards effective adaptation to human needs. Indeed, it is remarkable how the main elements of urban form and fundamental patterns of combination that have structured the first cities of Mesopotamia were the same as those of late-nineteenth century, including the major cities of London and New York. Then something happened which started to radically transform the dominant processes of city building. Due to a combination of different drivers, including demographic increase, real estate emergence, new patterns of mobility and new planning theories (mainly the garden-city and the modernist models), some elements of urban form lost their importance and new urban landscapes started to emerge. These were, and still are, landscapes of low accessibility, density, diversity and continuity. While acknowledging a number of positive aspects in twentieth century processes of city building, this paper argues for a recovery of the structural elements of this six millennium legacy that in 'a momentary lapse of reason' were lost in the twentieth century. The paper states that an effective understanding of the 'town-plan' (including streets, street-blocks, plots and buildings) based on that urban culture of 6.000 years can support the transformation of our urban landscapes in order to make cities more inclusive, safe, resilient and sustainable.

Urban fabric recovery as a pre-condition for the historical and identity continuity in the post-trauma reconstruction.

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Keywords: *post-trauma reconstructions, urban fabric recovery, spacial identity features, post-seismic, post-war*

Abstract

Urban fabric, representing the result of a series of “re-writes” layered in different historical eras, can be defined as the real keeper of a settlement spatiality and of its identity shape.

Even if in the belief that an effective post-trauma reconstruction cannot disregard multi-scalar actions that keep together settlements' different components, the urban fabric recovery is identified as the necessary condition to assure the historical continuity and to refund the population for the loss occurred. Starting from a critical review of both European post-war reconstruction and Italian post-seismic experiences, the essay analyses the different approaches towards the lost fabric and especially towards the ground floor original plan, as the ancient witness of an historical center, shaped during the centuries adapting itself to the natural morphology of the site.

The philological reconstructions are studied comparing cases for whom the confirmation of the original plan is substantiated with a faithful building's reconstruction (even if with different attitudes towards constructive techniques) and cases for whom, also for regulation reasons, building types were completely denaturalized. In addition, the study aims to analyse the reconstructions characterised by significant thinning and by the introduction of new fabric portions, sometimes in continuity with the logic of settlement arrangements and some other in deliberate opposition. At last it is studied the “from scratch reconstructions” which act a clean state and an integral re-design at all scales. In addition to this topic it is made an excursus on the post-seismic relocations as emblematic examples of the unrecoverable break between traditional spatiality and the new imposed urban models. The overall aim is to set-out innovative methods and best-practices to the starting reconstruction-process of Central Italy in order to develop designs able to combine safety improvement and housing update with conservation of urban memory.

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Design strategy and urban configuration: morphological study of two new towns in mid-twentieth century Brazil

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Keywords: *garden city; city beautiful; functional city*

Abstract

Cianorte and Angélica are two new towns planned in Brazilian hinterlands' pioneering agricultural colonization zone. Both designed in the early 1950s, each one is linked to a specific town planning tradition: Cianorte late resonated the notion of the city as a work of art, alongside with some features of the garden city; Angélica early exemplified in Brazil the rationalist urbanism for a functional city. By contrasting the urban forms of the two cities, this paper explores the adopted design strategies, and points out their potentialities and weaknesses. As a result, this morphological study unveils, on the one hand, the layout of a town according to classical precepts of composition and the creation a unique townscape; and, on the other hand, the configuration of a radically modern, functionally standardized and uniform town. In both cases the adopted design strategy impacted the development of the urban form: in Angélica, the land use pattern and the occupation of the urban tissue did not follow the revolutionary, modernist configuration of the morphological elements; in Cianorte, the urban growth ignored the city-beautiful layout and did not materialize the proposed planning proposals.

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Spatial Ambiguity in Singular Buildings. Timeless composition principles interpretation.

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keywords: *ambiguity space, threshold, singular building*

Abstract

The contemporary city incorporates architectural spaces that question a classic and rigid boundary between public and private space. Spatial configurations emerge that promote ambiguous spaces of collective appropriation where compositional themes such as porosity, transparency or the physical dilution of limits are understood as tools for the design and creation of new spatial relations between building and city.

Therefore, the article seeks through a comparative reading based on typological analogies (between buildings or urban substrata of the past and works of the present) to decode some of these phenomena and systematize different types of transitional spaces between the built fabric and the public space. With Lisbon as a framework, namely a set of paradigmatic singular buildings of this reality, we intend to understand how spaces such as atriums, courtyards, passages, corridors, galleries or thresholds contribute to the construction of thick ambiguous spaces where public and private overlap. The inner-outer binomial acquires a new spatial dimension, where the limit gains thickness and where the collective dimension participates in the overlapping exercise.

Methodologically the article is based on a morphological decomposition of the contemporary architectural objects analyzed in comparison with examples from the past, establishing parallels between the conceptual approaches and, thus, underlining their role as didactic objects and timeless references for the conception of future solutions.

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Understanding seashore streets: urban morphometrics as a tool for climate-induced risk assessment

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Keywords: *urban morphometrics, climate change, seashore street*

Abstract

Morphological analysis rarely focuses on a detailed and systematic quantitative understanding of the character of historical urban fabrics (Dibble et al., 2015). Amongst its many possible applications, such information is becoming critical to understand the ability of existing fabric to adapt to climate change, for example in the case of coastal settlements and their capacity to cope with rising sea levels.

This paper uses urban morphometrics (a quantitative branch of urban morphology) to identify the nature of historical cores of seashore streets along the Portuguese coast. Thirty-five cases have been identified as particularly vulnerable to the rising average sea level and the extreme weather phenomena that will become more frequent and intense in the coming years (IPCC, 2014). This research aims to describe the configuration of their urban form and its relation to the sea (form-sea connections), represented by low and high levels of tides, and to study its ability to cope with the possibility of frequent flooding. Both of these aspects are quantitatively captured and assessed.

This morphometric study and the quantification of form-sea connection capture the physical profiles that describe each seashore street. Their geographic distribution is then assessed to understand how intentionally or randomly they are distributed across Portuguese climatic zones, as these attributes are critical to identifying morphological types and assessing the climate change-induced risks of the extended urban forms made up by them.

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Shiraz and Kashan. Substrate and Urban form: knots and path in the process of transformation.

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Keywords: *Sostrato, Shiraz, Kashan, Urban Morphology*

Abstract

Two doctoral theses, two Iranian cities, have been the subject of research work target to the renovation project of the building fabric. In one case it was a matter of understanding if it is how the school building can perform a specializing function in the building fabric (Strappa G. 2016) , in the other instead focused the attention on the theme of residential regeneration in the tectonic and compositional tradition.

This paper presents the synthesis of the regressive and stratigraphic reading of the historical fabric of the two cities. The work refines the concept of “restructuring road”, focused by Caniggia, used to read the shape of the city. (Caniggia G., 1984; Carlotti P., 2018).

The applied method is to identify, on digitized aerial photography cartography of Cadastre, the role and meaning of the forms present in the map; identifying from time to time nodes and axes that belong the city to have an organic system of relationships (Sauer C. O., 1925). Then subtracted from the cadastral draw, it allows to identify prior substrates organized with systems and structures linked to other different logics and economies.

The overlapping of different urban layers has made it possible to highlight relationships and rules that presided over the different phases of the transformation process of the building fabric, which today can prove useful for the architectural and urban regeneration project.

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Urban form reading in Lisbon. Decoding the porosity of Almirante Reis avenue valley.

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keywords: *Urban morphology, Urban fabric, Delaying, Strata interpretation, Lisbon*

Abstract

The paper addresses the work developed in the first semester of the fourth year design studio taught at the Faculty of Architecture of the University of Lisbon. The pedagogical approach of the exercise is based on urban form reading as the first act of project, acknowledging in the urban fabric the grounding for the conceptual approach.

The valley that is structured by the axis Rua da Palma/Avenida Almirante Reis, constitutes a complex urban territory of the consolidated and diverse urban fabric of the city of Lisbon. Resulting of the sedimentation, overlapping and juxtaposition of strata in the course of time, this urban territory is characterized by a constant dynamic, nonetheless keeping its identity in the context of the city. During the last decades voted to processes of abandonment, it is nowadays a stage for the renovation and reuse of its fabric, constituting a privileged context for the development of the urban design studio academic assignments.

A segmented and decomposed approach to the complex nature of the urban object allows its decoding and renders evident otherwise hidden patterns. Thus, the reading process of the territory is made from the segmentation of continuous linear paths, decomposed according to a set of predetermined systems and strata in the present moment, understood as the result of successive building periods. Interpretative drawings and models are assembled as final elements of the critical reading of the urban fabric, revealing a starting point for the consequent urban projects framed by a common idea that urban life generates from the friction caused by the porosity that is built in the thickness between public and private spaces.

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Urban recurrences as spaces generators

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keywords: *fragmentation, abacus, tradition, topography, typology, tectonics*

Abstract

The area of Fontainhas, on the edge of the center of the city of Porto, has been identified as a physical pretext to investigate the possibilities of reactivating portions of the degraded urban fabric starting from the introduction of new forms and programs.

Through the adoption of specific abacuses of generic basic elements as means for both the understanding of the city and the urban regeneration, the work We present is addressed through the division into four macro-areas of investigation, tradition, typology, topography, tectonics, as distinct themes in continuous relationship with each other.

The study works around the concept of recurrence, identifying both single recurring elements and repetitive aggregation mechanisms within the urban form. These recurrences can be observed, read, analyzed, reworked and placed at the base of the proposal of new urban fabric, which appears therefore in direct continuity with the existing one.

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Digitizing typomorphology – Design worlds, morphologically informed urban design and City-Information modeling (CIM)

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Keywords: *City-Information modeling (CIM), digital, urban design*

Abstract

Typo-morphologists investigate the physical form of cities and processes of formation and transformation by abstracting urban elements and types or urban patterns (Caniggia & Maffei, 2001 [1979]; Alexander et al., 1977; Alexander, 1979). The process of urban design can be guided by typologies as a theory or doctrine of types (Steadman, 2014).

Donald Schön (1988) argues that designer's ways of knowing can be described through the notions of rules, types and worlds. Design worlds are environments entered into and inhabited by designers when designing. They act as holding environments for design knowledge. Designing implies experimentation within design worlds. Urban designers explore urban phenomena, define urban qualities, identify and tackle urban problems, enter design worlds, recognize, play with design elements and establish rules to combine elements, create drawings or models.

This paper discusses possibilities to conjoin urban morphological research and concepts of morphologically informed urban design (see Sanders & Woodward, 2015; Sanders & Baker, 2016) into City Information Modelling (CIM) as a new digital tool for urban designers. CIM should integrate typologies within toolboxes of design elements and rules. CIM should serve as digital design worlds where urban designers can play with design elements, model and analyze urban scenarios and typological processes. In architecture, there was an evolution from Computer-Aided Design (CAD) to Building Information Modelling (BIM), but in urban planning and design, where the Geographic Information Systems (GIS) are often used, there is no such digitizing analogy.

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Urban Space Index (USI) and morphologically informed urban design – Architectural elements and quality of urban space

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Keywords: *Urban Space Index (USI)*, *architectural elements*, *urban design*, *typologies*

Abstract

Urban design need to draw upon the evidence of urban morphology as a methodology of design that evidences the character of a place (Sanders, 2013). The typological analyses (e.g. Sanders & Woodward, 2015) can inform the diagrammatic knowledge of urban designers (Schön, 1988; Dovey & Pafka 2016; for experiments with urban designers see Sanders & Baker, 2016)

Quality of urban spaces is an essential aspect of livability. Architects and urban designers have a unique background to deal with the experiential qualities of cities. (Southworth, 2003; 2016). The quality of urban spaces can be explored specifically as interaction between buildings and the street (Jane Jacobs, 1960; Stojanovski, 2019).

This paper proposes a morphological tool and analytical method called Urban Space Index (USI) to analyze the quality and attractiveness of urban spaces. The method dissects and creates typologies and compositions of architectural elements in the interaction between buildings and the street, calculates an index of this interaction and visualizes the results in the urban plan. There are parts of cities that are not welcoming and attractive to the public. This typo-morphological method can be used by urban designers and planners to identify these negative polarities (Caniggia & Maffei, 2001 [1979]).

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Algorithmic Control for the Generation of Urban Block: A Parametric Approach to the Plot-Based Urbanism

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keywords: *generative urbanism, algorithmic design, parametric modelling, plot-based urbanism, design control and coding*

Abstract

Cities evolve through certain building rules through dynamic and interactive processes. Even the settlements which have developed without any rational planning process are (trans)formed through a specific set of codes and conducts. The rule-based framework that is defined by simple building codes, basically, provides an operational basis for the emergence of different urban typologies throughout the history. The fundamental use of codes derives from the need for ensuring integrity and coherence of collective urban form within the generative processes.

In the very context of modern development and transformation, plans and codes have been the basic apparatuses to shape urban environment over the past century. Increasing complexity and the level of complexity through the multiplicity of the actors involved (i.e. local government, developers, contractors, designers and users) requires the development control systems that are more flexible than before. Defining responsive coding techniques rather than solely relying on the masterplans as static control schemes turn out to be an essential endeavor of the contemporary urbanism. Such an alternative model necessarily calls for a bottom-up perspective on planning responsive to the incremental dynamics of urban formation. Along with its basic premises of controlling urban form in the very context of the plot, the emerging discourse of 'plot-based urbanism', in this regard, potentially suggests a fruitful basis for an alternative methodological perspective in urban design.

Computational modelling tools run by generative algorithms, at that point, suggest a very relevant technique to put such alternative approach in practice. Generating various compositional patterns via certain geometric components in accordance with the certain measurable variables of forms and patterns, parametric modelling enables designers to have an effective control over the generation of complex geometries. In the context of urban design, that means the possibility of the control of urban formation through the simulation of multiple interactions between the plots, the smallest generative unit of collective urban form.

The current research, in this framework, proposes a parametric model to integrate computational design to the development control frameworks in the very emerging context of plot-based urbanism. Utilizing the already existing development codes of the spatial planning system in Turkey as well as providing it with supplementary parameters, the proposed algorithmic model suggests a concrete basis to discuss the possibility of the algorithmic control of urban fabric in the view of plot-based urbanism.

Changes in urban fabric – a cause or a result of an innovation district?

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keywords: *urban changes, innovation district, industrial district*

Abstract

The goal of our paper is to look at the concept of the innovation district as a vehicle of urban transformation and to focus on tactical and strategic interventions connected to the IT industry that change the urban morphology, as well as the symbolic meaning attached to a place. Research into economic geography shows innovative industries (especially high-tech) have a higher tendency for spatial concentration than other types of industries. We are focusing on 'innovation districts' that may emerge naturally or may result from the decisions of urban administration and planners who are increasingly aware of the relationship between spatial proximity and innovation processes. To demonstrate the limits and potential of the naturally occurring innovation district concept, we focus on transformations taking place at Zabłocie, Kraków and Jeżyce, Poznań, both in Poland. The Zabłocie and Jeżyce districts can be recognized as a typical examples of Polish NOIDs.

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Landscape analysis for digital description of urban morphology of Upper Kama region towns

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keywords: *landscape analysis, documentation of architectural heritage, digital documentation, environmental objects, historical center, historical landscape*

Abstract

Digitalization of survey and conservation methods of architectural and historical monuments expands the possibilities of documenting environment and the landscape analysis. Combination of research methods allows to clearly represent architectural environment. The creation of collected data structure and put it into entire database is a necessity for later use of information. The formalization of information is the part of the process of database creation. The article describes the process of landscape analysis in order to create a database. Some results of landscape-visual analysis carried out for the cities of Cherdyn and Usolye which are located in Perm Region, Russia. Cherdyn and Usolye are the old towns with great historical background. Usolye is located on lower river bank and consist of different condition monuments of 19th and the beginning of 20th centuries. Cherdyn is the city on hills has orthogonal structure. The preserved blocks of urban structure are including monuments of 19th century as well as new buildings. Different urban structure allowed testing the survey approaches for varying research scenarios. The initial principles of cataloging the data are presented in the paper. The described experience allows us to estimate the amount of collected data. digital 3D models obtained by laser scanning and photogrammetry together with tradition survey give the most complete digital model of the historical parts of the city.

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Morphologie des écoles primaires québécoises : Débat entre le modèle, le type et le projet d'architecture des écoles d'après-guerre

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keywords: *Typomorphology ; Elementary School, Construction, Configuration, Program*

Abstract

L'école primaire devient obligatoire au Québec en 1943 ce qui entraîne à partir de 1948 une vague de construction massive de nouvelles écoles dans les villes et les nouvelles banlieues née dans la prospérité de l'après-guerre. Sur les 2330 écoles primaires, environ 50% ont été construites entre 1948 et 1965, et un autre 20% avaient été construite avant 1945. On estime ainsi que 70% des écoles sont vétustes et demandent des rénovations majeures.

Les archives nationales du Québec conservent des plans types commandés par la Direction de l'Instruction Publique entre 1948 et 1963. Cette présentation explore les caractéristiques morphologiques de ces écoles-types; dans leur plan, dans leur construction et la configuration du programme. L'étude traite aussi des cas réalisés, dans leur implantation urbaine et leur évolution depuis près de $\frac{3}{4}$ de siècle.

Derrière le projet d'une éducation publique primaire pour tous, l'architecture révèle des variations confessionnelles, entre les systèmes protestant et catholique, des disparités régionales, entre ville, banlieue, village et campagne, des inégalités de ressources et de moyens dans la construction des bâtiments. Le recours au plan type soulève des conflits avec les architectes qui voient une concurrence déloyale et une solution incomplète. Il pose le débat entre le modèle, le type et le projet d'architecture.

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Urban morphology education in Serbia: Origin, genesis and new tendencies

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Keywords: *urban morphology, education, Serbia, teaching urban morphology*

Abstract

The origin of urban morphology education goes back to the beginning of the 1970s and a period of radical education reforms at the Faculty of Architecture in Belgrade, where urban environment became the main interdisciplinary topic. The importance of urban form has been since emphasized by planners, architects and politicians in various planning documents, symposiums and as such, became an essential segment of the architectural education. The subjects such as Contemporary architecture and form of the city, Urban environment and urbanization, Urban technic and composition and City environment were an important segment of the education for many years. This tradition was strengthened even more in newest accreditation, due to the individual contribution of academics who introduced new courses such as Morphology of the city and Urban Typology and Morphology. Having in mind recent contribution of researchers to emphasise the challenges of teaching urban morphology, this paper aims to enlighten the origin and genesis of the education of urban morphology at the Faculty of Architecture, University of Belgrade and to shed the light on new tendencies and means of teaching in present days. The paper will analyze syllabus of the courses, teaching methodology and present examples of student's projects on three different levels and courses: ex cathedra on the bachelor level, practical implementation of theoretical notions in studio design on master level and research-based work on the PhD level.

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“Morphological ‘Reading’ as a Catalyst for Conservation: results from an urban conservation course in Penang, Malaysia”

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keywords: *urban morphology, urban conservation, mid-career training*

Abstract

This paper will focus on the results of an urban conservation training course that I have been directing and delivering in Penang, Malaysia since 2012. A product of an institutional collaboration between the Getty Conservation Institute (where I work) and Think City, an urban regeneration agency in the World Heritage city of Penang, Malaysia (inscribed in 2008), this short but intense course is designed for mid-career professionals (architects, urban planners, and urban designers) from the ASEAN network, ten countries in Southeast Asia. This course had its first iteration in 2012 and there have been (so far) five times that the course has been offered. Although the course is not focused on urban morphology, there is an important component of the course centering around how to ‘read’ the historic fabric of a city such as Penang, which has several cultural overlays in addition to being a “Malay” city (e.g., South Indians, Chinese, Muslims from several contexts, Europeans in a post-UK colonial context, etc.). The lessons from these pedagogical, in-the-field experiences should be valuable for participants in the conference, especially since they relate to a cultural context situated outside Europe and North America.

In this course, we use an actual historic neighborhood (within the World Heritage ‘buffer zone’) to introduce participants to the challenges associated with ‘reading’ the neighborhood from a morphological and historical evolutionary perspective. This entails understanding the ways that the traditional Southeast Asian ‘shophouse’ has evolved since its pervasive introduction into the city during the late-19th century, and it also implies the need for ‘reading’ the place with micro-level sensitivity. This field exercise provides an anchoring experience for participants, who not only recognize forms and typologies stemming from their home countries, but who also are required – in the context of the course – to use this conceptual anchor as a basis for understanding ‘significance’ and how to plan for the retention of that significance as the city evolves.

The other relevant lessons from the course are: (1) the need to understand architectural typologies within contemporary contexts of rapid change; (2) the importance of engaging with local communities – and with colleagues of disparate professional backgrounds – in determining how and where change should occur; and (3) the importance of understanding and applying a well-recognized conservation methodology so that significant historic fabric can be properly retained for the future.

Teaching Masterplanning for Change: the development of a research-led and evidence-based method for the next generation of urban designers.

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Keywords: *Teaching, Masterplanning for Change, urban design, resilience, time-consciousness*

Abstract

Substantial empirical evidence confirms the role of urban form in influencing many aspects of the economy, society, and the ecology of cities. And yet, while this is widely acknowledged in disciplines such as Environmental Psychology and Urban Morphology, the same understanding rarely guides architecture and urban design, in professional practice and, even more so, education. Failure to link how cities are *designed* and how they are *used* and *perform* has led to the production of highly unsustainable places with little capacity to accommodate changes over time. Given the convergence of challenges revolving around urbanisation, from economic instability to social unrest and climate change, establishing a stronger link between the configuration of places and their sustainability and resilience is vital.

In response to this need, over the last 10 years, the Urban Design Studies Unit at the University of Strathclyde has developed a new approach to teaching urban design, named "*masterplanning for change*", that puts at its core the understanding of urban form and its effects on the social, economic and environmental sustainability of cities, with the aim to reintroduce an incremental, time-conscious perspective into place-making. Working on projects commissioned by real clients and guided by the rules that shaped successful places in history to date, students learn to look at relationships between morphological elements and at how these inform human activities and contribute to long-term resilience.

So far, this approach has been successfully applied within the UK teaching system, with impact on practice and policy, although its principles are ubiquitous.

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Schools of Municipality I of Rome: reading of the derivation process from the special type: the palace and the convent

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keywords: *Urban morphology, architectural design, urban design*

Abstract

This research presented is a part of a doctoral thesis that is not already concluded. The latter wants to making a reading of the training and transforming school buildings processes into consolidated fabrics. In particular, this paper describes how the school building retains the typological characters of palaces and convents. Indeed, the architects, who had the task of outlining the configuration of the schools, had to reformulate new theoretical and practical paradigms for these buildings. The design must synthesize, coherently and organically, the new urban role of the building, the relationship with the city and functional needs. The searching for the school's shape leads the designers to analyze the matrix characters of the consolidated building types, that are permanent in the organic process made by continuous transformations and innovations. In this complex process of definition of type, the references are convents and the palaces. The schools of the Municipality I of Rome are studied through the tools of urban morphology. They have some differences: one part of the schools analyzed is obtained in pre-existing special buildings in which it's possible recognize some typological interventions and adaptations, the other part collects the new buildings that is constructed on an empty area adopting the matrix of the type adapted and updated to the new complex of required functions. The study of these organisms explains the typological process, arise from the need to intertwine some new elements to the original matrix, such as special spaces (auditorium, refectory, laboratory, gym ...).

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Schools as Elements to Regenerate the Communities in the Contemporary Cities. Case Study: Kashan, Iran

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keywords: *Urban form reading*

Abstract

It is apparent that all around the world schools are considered as functional elements of social, cultural and economic growth of the communities. Therefore, it could be an area of interest for architects and urban planners to design schools not only as separated and isolated buildings only for educational objectives but also as public centers with interactions with the urban space next to them. Consequently, they could play a significant role to rejuvenate the context of settlements by promoting academic, social and urban cohesion in this way.

This paper is going to address the issue of schools as integral elements to regenerate communities in the contemporary cities through the ages. We carried out this procedure in the historical city of Kashan in Iran. To achieve this goal, this research aims to study the morphology of Kashan first at urban level to recognize different phases overlapped each other, then in a plot and block levels. In the following, it examines schools inside the urban fabric to investigate possible transformations in nodal areas of the urban space.

To carry out this task, field research and descriptive-analytical techniques were employed to develop the documents. The schools that were included as case studies in this research were analyzed through urban morphology tools. Moreover, block and plot types inside the urban contexts were studied to support better identification, understanding and description of this procedure.

Rethinking school by reinventing the city

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Keywords: *School, Urban Regeneration, Centrality*

Abstract

Pointing out what is being produced in society and within the city at the turn of the new millennium, the paper proposes a reflection about the possible role of the school as an element capable of acquiring a key role in the reorganization of the whole urban system.

On the wake of the proposed architectural and urban innovations such as that "Reinventer Paris" (2014), based on "C40 Cities Climate Leadership Group" and which was followed by the most recent initiative of "ReinventIAMO Roma, the reflection about school building try to approach the topic of Urban Regeneration of the urban fabric, with the dialogue in between local communities and trying a low profile which a "mix of functions" that - relating to the cases - will bring to the territories concerned.

The research, directed by me, funded in 2017 "School and community", experimentally led within the LPA research laboratory - Lettura e Progetto dell' Architettura, on didactical floor and doctoral research level, is measured on this perspective. In particular, created by research (Urban Morphology and Design) it is focused on three schools: number one posed at the beginning of the road "Pineta Sacchetti" in Rome (Liceo Seneca), another one, within the Urban tissue of the historical city, about halfway of road "via Giulia" (Liceo Virgilio) and one last just on the edge of the Trastevere Neighborhood (Università John Cabot).

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Urban form as a complex adaptive system: building a parallel between concepts, models and organisational principles in resilience theory and urban morphology

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Keywords: *Complex Adaptive Systems, Resilience, Theories of Change, Systems Theory, System Ecology*

Abstract

In recent years, several authors have sought to build a bridge between resilience thinking and urban systems. And yet, the role of the morphological structure of cities in enabling or constraining resilient responses has been largely overlooked. One of the main reasons for this is that, whilst resilience is considered as a key property of complex adaptive systems (CAS), urban form is rarely considered as such.

The process of morphogenesis and transformation of urban form, as described in different “*theories of autonomous change*” developed by key exponents of both the Italian and British-German school of Urban Morphology, provides compelling evidence on the hypothesis that urban form behaves not unlikely other types of CAS. Despite this, many still see urban form as a mere “*container*” of life, actions and transactions.

To overcome this gap, we build a parallel between concepts, models and organisational principles developed in resilience theory to explain dynamics of change in complex adaptive systems, as *Adaptive Cycles* and *Panarchy*, to analogous models independently developed in Urban Morphology to describe dynamics of change in urban form, such as *Burgage Cycle*, *Territorial Development Cycle*, *Urban Form Compositional Hierarchy* and *Fringe Belt*. Once a more solid understanding of the urban form as complex system is formalised and corroborated with examples, a bridge between resilience theory and urban form will be built through a systematic investigation of the role of the morphological structure of cities in enabling or constraining resilient responses.

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Integrating Resilience Concept and Urban Morphology. A contradictory merging attempt or a promising combination?

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Keywords: resilience, urban morphology, change, complexity, leaf-structure

Abstract

Today there is no doubt that cities are particularly vulnerable to any kind of pressures: from the effects of anthropic behaviours, to natural disturbs, shocks and climate change impacts. The increase in urban complexity requires a better understanding of physical urbanization on one hand, and a shift in how cities are linked to environmental dynamics, on the other. Tackling the urban complexity requires a socio-ecological system-view where cities appear as a living and dynamic system, whose processes and structures are interacting over time at morphological, ecological and socio-cultural levels. These interdependencies can be handled by understanding the extent to which urban forms will be able to resist, adapt to or evolve under pressures and fulfil needs and functions sometimes similar, sometimes different from those they were originally designed for. However, the explicit introduction of the element of change through time in the urban morphology field might seem contradictory, as the traditional image of built environment links to order and rigidity, in contrast with the features of flexibility, adaptability and evolution. To this regard, the resilience concept appears an interesting lens through which read and understand the changing urban-world.

The paper explores the combination of urban morphology and co-evolutionary resilience approach, considering urban form as a key factor in urban resilience. Dealing with some morphological aspects in relation to main resilience attributes, the work discusses possible interdependencies between resilience theory and urban morphology and seeks to understand if “resilient urban form” represents a “property” of cities or rather an “end-point”.

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From urban tissues to special buildings and public squares: architectural design experimentation in Pera, Istanbul

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Keywords: *Urban Morphology, building typology, architectural design*

Abstract

Pera, the Genoese urban settlement in Constantinople from 1303, despite the long Ottoman urban development, still beholds some of the morphological characters typical of western historical cities, (Conzen, 1960), (Mittler, 1979). This paper illustrates a design case study based on the typo-morphological design approach (Caniggia, Maffei, 2001). We founded the undergraduate design studio held at Özyeğin University (Spring 2018) on the hypothesis that the transformation of urban tissues is inevitable and necessary (Strappa, 1995). This modification can happen in continuity with the diachronic evolution of the context, as an organism (Strappa, Carlotti, Camiz, 2016), or in complete opposition to this processual sequence becoming a substitution. We used the formation process of the urban tissue as a model for the design process (Camiz, Carlotti, Diez 2017), by recasting some of the adjacent demolished row-houses into a special building with an inside courtyard (Palazzo), but adopting a contemporary architectural language. The project herewith presented includes also the recasting of part of the urban tissue into a conference hall, in a diachronic sequence with is typical of the formation process of churches within western monasteries and the transformation of urban tissues into public squares by demolition (Camiz, 2016).

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Urban morphology and critical reconstructions: the case of Friedrichstadt

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Abstract

The Berlin *Friedrichstadt* is characterized by an heterogeneous fabric. Its northern sector consists indeed of regular and relatively small blocks with closed perimeter, while in the southern one blocks are bigger and more open to the street. This difference is not much due to the Berlin Wall, which split *Friedrichstadt* for almost thirty years, but rather is a feature of the district that already emerged along the eighteenth century. At that time, the urban fabric in northern *Friedrichstadt* was regular, outcome of baroque planning, while in the south, where living and agriculture coexisted, blocks were bigger and irregular. A considerable difference within the structure of *Friedrichstadt* endured until the twentieth century, before the Second World War razed most of the district. With the critical reconstruction of both sectors, conducted in accordance with the historical urban plan, also the gap between their structures was restored. Indeed, the different approaches followed in the reconstruction of southern *Friedrichstadt* in the eighties, conducted by the IBA, and of both *Dorotheenstadt* and northern *Friedrichstadt* in the first half of the nineties, introduced further disparities for their different focuses. While the critical reconstruction of the IBA mostly concentrated on the urban block, the plans of the nineties focused again on the plot, almost ignored by the IBA. The research retraces, considering both written documents and historical plans, the development of *Friedrichstadt* and provides a critical retrospective to the approaches of its post-war reconstruction, to clarify the reasons behind a dualism of the neighbourhood still perceptible today.

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distURBANces

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keywords: *disturbances, resilience, munich*

Abstract

Following the IFOU Conference on *Reframing urban resilience implementation in Barcelona 2018* the examination on the topic of (*Scanning for*) *distURBANces* (M. Stenger, 2018) in the fabric of our cities needs to be continued by examining those structures and their impacts and potentials in detail. *DistURBANces*, like powerplants, railway tracks, parking areas, stadiums, but also bridges and troughs are mostly monofunctional structures that -for a certain time- ensure or maintain the city's metabolism. Eventually an despite their huge and scale breaking dimensions, for the Citizens these publicly owned Structures tend to get miraculously "invisible". Those, being confronted with them as neighbours or bypassers simply get used to them, accepting their value or structural necessity. If those structures lose that value by getting obsolete, out of fashion, abandoned or technically replaced by more modern or useful structures that doesn't have to mean that they are soon to be physically replaced. Like mountains or valleys in the landscape they form obstacles in a potentially homogeneous urban topology. And by doing so they also create borders, gaps and irritations. Urban regeneration, as will be shown on the example of Munich and parts of our work there, will only be fully effective if we -among multiple other techniques- find methods of early recognizing these *distURBANces*, examining their potential and reconnecting them with their environment through exciting new functions, transformations and a policy of open-house and transparency. This and their inherent grey energy is the greatest resource our cities provide - if we only used it.

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Minimalist approach for future regeneration

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Keywords: *Minimalism, regeneration, urban form, minimalism in urbanism*

Abstract

Lifestyles, consumption habits, ideologies and politics of communities are some of the major factors that orient the urban forms. Chaotic cities, mass consumption, postmodern discourses, impulse buying-being in debt and overconsumption of resources have created a rising lifestyle trend mostly in developed countries during the last decades. Minimalism as a lifestyle or philosophy has many potentials in the context of urban form too. As in the arts in 1900's started with K. Malevich and as in the architecture in 1940's started with L.van der Rohe, minimalism has made a great impact on both urban form and lifestyle in many cities. Reducing to the basic form which is the main assumption of minimalist approach dates back to ancient ages. The minimalist approach in history was seen in painting, sculpture, fashion, architecture, music, cinema, literature and philosophy. As a paradigm shift, the aim of this paper is that minimalist approach in urbanism regarding its relation with philosophy and typology would create sustainable and energy efficient new typologies for future de-cluttered cities. For the future regeneration processes, minimalist approach might be seen as an anti-neoliberal tool in the context of new urban forms instead of individual changes.

Read to create and create to design

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Abstract

The built environment is a resource for design, a library of tools and ideas. One of the keys to find and free types, models and associations incorporated for creative recombination is to abstract the patterns of relationships we find in our perception of the built environment and use them as potential solutions. Below it is necessary to identify the assembly processes and their components, which are a means to achieve the design purpose. A further task is to examine in more detail the different approaches to urban morphology, in particular their logic and their specific objective, to understand if and how they fit together or how they could more actively integrate with each other. The logic is simple: if the different approaches are studying the same thing - the urban form - and a multiple description provides more insight than a single point of view, we will benefit from understanding the specific relationships between different points of view. We must work through the logic and implications of the existing framework of ideas and start filling in the spaces left empty. Some of these spaces have already become evident and most involve a more active comparative study. The challenge is to select the concepts and methods that allow common principles to manifest and avoid superfluous analogies. In short, innovation involves modifying the elements of an existing previously developed type that are recombined to create something new that works and becomes the basis for a new design.

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On Methods. Towards an operative reading of city morphological legacies: common-building and building-type

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keywords: Building-type, street layout, urban fabric, Portuguese city

Abstract

The paper addresses an operative reading of the city to decode the Portuguese city form and explores the transfer of its principles to urban design process.

The research objective is to learn from the past and establish an analogous relationship between reading and designing the city.

Starting from the topic of the urban fabric composition, particularly in regard to the reading of "samples", i.e. urban fragments with urban elements serial repeated, the aim is to deduce the laws or design principles behind the shape of historical cities.

Methodologically, the proposed approach is based in a form of dialectics attempting to bridge a conceptual relation between the urban fabrics produced throughout the time with the conjectural process of its design.

Using drawing as an interpretation tool, together with delayering and elementarism as methodological procedures of decomposition, allowed for the exercise of progressive abstraction and consequent simplification of the complexity of the urban form. The purpose is understanding the whole through the knowledge of its components

From the conjectural point of view, we reconstituted the code of design principles based on a theoretical frame which defines the built typologies structural interference within the city built-fabric.

With the comparison of some paradigmatic case studies it is explored the legacy of notions as context and tradition in the Portuguese building typologies and its current influence in Portuguese urban form.

In addition, this methodology proposes an interference between reading process and design of an urban-architecture. It means that operative reading should be understood as a transfer from the built-city and from the history to the city design process.

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Metabolist urban utopias and the project for the European city

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keywords: *Metabolist movement, Kenzo Tange, urban regeneration*

Abstract

The radical manifesto *Metabolism: The Proposals for New Urbanism*, launched during the 1960 Tokyo World Design Conference, was the expression of the most influential avant-garde movement in modern architecture in Japan. The utopian concepts it embodied were manifested in the designs for the modern city and the modern society, as a pursuit of new urbanism in post-war Japan. The city in the proposals of the Metabolists was seen as an "organic process" and its reconstruction was a pathway towards societal restructuring.

Kenzo Tange (1913-2005), considered the mentor of the Metabolist Group, published his first masterplan – A plan for Tokyo in the same year (1960), a visionary plan across the bay for a future expansion and structural reorganisation of the city embodying the Metabolists' principles. The utopian features of the plan for Tokyo and its spatial configurations had a continuous impact on the masterplans and the projects in which Tange was involved throughout his career.

This paper will examine the impact of the Metabolist urban utopias on the European city and in particular, it will study Kenzo Tange's master plans for Skopje (1965) and Bologna (1967), tracing their origins, urban morphologies and structuralist approaches. Through analysis, this research will outline the impact the Metabolist movement has had on the planning as an instrument for spatial restructuring and regeneration of the post-war European city.

Designing for Productive Urban Landscapes. Applying the CPUL City concept in Lisbon Metropolitan Area

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keywords: *Urban Morphology, Urban Design, Planning, Urban Open Spaces*

Abstract

Designing for urban agriculture has been recently acknowledged as a young discipline (Bohn and Viljoen, 2014), which should require the attention of architects, urban designers and planners to promote more sustainable urban cities and continuous productive landscapes. However, how to assess such landscape proposals? How can these be evaluated in terms of their social, ecological and spatial dimensions?

Based on the Continuous Productive Urban Landscape tool as proposed by Bohn and Viljoen (2005) this presentation exposes a framework for action which could be applied in Lisbon Metropolitan Area (LMA) in order to evaluate the spatiality of its contemporary food system and promote design solutions to improve it.

In order to do so, this presentation is organized in three parts. First, it introduces the problematic under analysis and the LMA case study. Secondly, it introduces the dimensions of the CPUL city actions, which could contribute to assess LMA as proposed by Bohn and Viljoen (2012): Action U+D; Action VIS; Action IUC and Action R. Finally, it identifies for LMA a preliminary database or repository of identified typologies to assess the application of the CPUL City concept.

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Quebec City Urban Forms and the contemporary architectural project

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keywords: *Urban architecture, Urban Morphology and the contemporary project*

Abstract

The North American city has great potential for exploring the relationship between existing, relatively new, urban and architectural forms and the contemporary project. Indeed, often the contemporary project is part of an edification process that is underway, even in the central parts of cities, and not crystallized as in more stratified contexts. In this case, the analysis of the urban and typological evolution is possible thanks to the use of an accessible cartography, which makes it possible to highlight the strata of formation and transformation of the urban fabric which remains an open process for the contemporary project.

On the other hand, being architectures and relatively recent urban forms, the link between them and the cultural and social context that produces them is more evident. This new perspective opens the door to a "sensitive morphology" in which the contemporary project establishes a dialogue between the history of the city and its architecture with the aspirations of its inhabitants.

It is in this frontier space that the project discussed in this paper was conceived. Located in Quebec City, Canada, this small property complex of 3 units completes a street corner in the Montcalm district. In a first step, we will briefly discuss the emergence of the neighborhood and in particular the role of the lot in question in the evolving urban structure. In a second step, the project will be addressed both as an element of the urban ensemble and also as a cultural product related to the intentions of the customers and therefore at a particular moment in the history of the city. Finally, a brief discussion will underline the specificities of this contemporary intervention in an ancient North American fabric.

Reproduction of the Edge as a Vitrine in Odunpazarı Historic District, Eskişehir

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keywords: urban morphology, historic landscape, design, star architecture, Eskişehir

Abstract

Eskişehir has become a brand in city planning and a major destination in domestic tourism in Turkey in the last ten years. The new role of “museums quarter” that is attributed to the edge of Odunpazarı historic district settled on hillside has a significant role in this branding process. The museums quarter separates the historic and modern parts of the city. However, the area was once lined with landmark historic houses, facing the main street going downward towards the city’s landmark train station. These houses, with a traditional Eskişehir architecture, were demolished during the street widening works in the 1980s. Neighboring the new boulevard, the rest of the demolished area stayed underused until 2000s. In the 2000s, buildings with an architecture similar to traditional Eskişehir architecture were constructed from scratch with modern construction materials. These new buildings that are built to be used as museums have defined the new edge for the historic district and they soon became a brand in domestic tourism. In 2019, the design of this vitrine is completed with star architect Kengo Kuma’s Contemporary Art Museum. In this context, the study will explore this reproduction process from the 1980s to 2019 through historical analysis method and will investigate the “hows” and “whys” of the reproduction focusing on the planning and design decisions that lead to morphological changes, and the roles of the actors in the process.

Trisungo: a typological-procedural research for the recovery of a village hit by the 2016/2017 earthquake.

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Keywords: *Reconstruction, typological procedural analysis, earthquake, identity features*

Abstract

Trisungo is a small valley-bottom village developed on the two side of the Tronto river, Arquata del Tronto municipality (AP). It is historically connected with the roman route Salaria that joins Roma and Ascoli and, in this municipality, it connects also Norcia and Fermo. This settlement has always been a nerve centre for the commerce of Central Italy and this is the reason why we can find there an incredible florid XVI-century architecture. After the earthquake, Trisungo suffered important damage, without arriving at a total destruction. Starting from a multi-scalar reading of the village (landscape-settlement-urban fabric- building types- constructive techniques) is draw up an urban recovery plan which includes thinning (punctual and controlled demolitions and consequently new building areas are detect) in order to simplify over-layered urban fabric to improve accessibility and escape routes. Within this layout are presented some pilot projects for both blocks and buildings with the overall aim of combine conservation and safety improvement. The contribution sets out the importance of a systematic approach to the post-disaster reconstruction based on the typological-procedural research in order to outline the inalienable identity features of an historical center. The only way to assure a kind of reconstruction consistent with the nature of the settlements and in continuity with their historical development is to base the recovery designs on the comprehension and re-proposing of these identity characteristics.

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Substrate and Contemporary Design: Mappano, the Sports Citadel

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Keywords: *Sport citadel, Substrata, Contemporary Design*

Abstract

The sports Citadel of Mappano adopts the historical traces of the Roman Landscape and their consecutive transformations over time, to establish the fundamental conditions for a new Architecture Design. It establishes a new centrality in between local settlements that surround the whole area recovering the substrate and, at the same time, it promotes a new phase of the morphological process of this area.

the project is defined by Two linear buildings, that are linked to the pre-existing emergences in the area, knotting all in the central sector, to shape the square of the citadel. All the main sports activities and related services are concentrated here. In this space with strong urban features, the coverage of the arena raises up. With its singular shape, it constitutes the most representative building of the project and a reference to the mountain range that forms the backdrop of the Turin landscape.

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Chelas Zone J revisited: urban morphology and change in a recovering neighbourhood

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Keywords: *Architecture; Housing; Urban Design; Urban Agriculture; Social Housing*

Abstract

During the 1950s and 1960s, neighbourhood planning in Lisbon underwent drastic changes. A first wave of council housing focused on low-density suburbs gave place to high-density housing, informed by modern planning.

Among the new council housing areas is Chelas Valley, by then overwhelmingly agrarian. Although an integral urbanization plan - the Plano de Urbanização de Chelas (PUC) - was prepared until 1964, the area was divided into six zones, urbanized in different periods, with great deviances from the original plan.

Upon construction, Chelas was challenged by social problems, including poverty, unemployment, criminality and a isolation from the rest of the Lisbon city. One particular zone, Zone J, has been particularly associated with this negative image. The architectural designs by Tomás Taveira and Victor Consiglieri introduced changes to the urban plan by Francisco Silva Dias and José Lobo de Carvalho. After construction, several municipal initiatives tried to improve living conditions in Zone J, ranging from façade changes to demolitions. All along, it has been accepted that the urban form of Zone J was a determinant factor of its failure as an habitat.

Here, we revisit the original Zone J Plan. How was it implemented, and how has it changed since? What has been the input of the residents in the territory they inhabit? Can it contribute to make Lisbon a more sustainable city? This presentation aims to answer these questions, while trying to identify parallels with other urban areas in crisis which share morphological characteristics with Chelas Zone J.

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