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# THE URBAN FORM IN MORELLA AS A HISTORIC LABORATORY IN THE 21<sup>ST</sup> CENTURY

Beltran Borràs, Júlia

Universitat Politècnica de Catalunya, [julia.beltran@upc.edu](mailto:julia.beltran@upc.edu)

**Abstract:** This paper is a discussion of some patterns and elements of urban form seen in a historical perspective. It is an attempt to define the relationships between architectural design and history in the 21<sup>st</sup> century, taking into account different voices and points of view: the land, the buildings, the urban spaces, the architects, the inhabitants. Starting with the presentation and discussion of the dialogical model in architectural research, my contribution will show that, taking into account the complexity of relationships that have conditioned the configuration of the city, it is impossible to separate the physical and the social dimensions of architecture and urban planning. The main purpose is to evaluate the urban form of Morella through the dialogical model, analyzing the interactive relationships between design and environment. The historical core of Morella (Spain) is surrounded by old fortification walls, completely conserved until today. In recent years, some new public buildings have been built by Spanish famous architects outside the walled city. This paper focus our attention into the evaluation of contemporary design in relation to historic urban form, studying the configurative knowledge of architecture and planning, that is embedded into building and urban forms in a “generative way”. The purpose is to understand the meaning of the architectural design related to the problems behind, not only to the quality of architecture.

**Key words:** Urban Form, History, Architectural Design, Spatial Configuration, Morella.

## 1. Introduction

Jeremy Till (Till 2012) already pointed out that is still necessary to abandon three myths that have evolved around architectural research, and which have held back the development of research in our field: the first myth is that architecture is so different as a discipline and form of knowledge, that normal research definitions or processes cannot be applied to it, the second myth argues that in order to establish itself as a credible and ‘strong’ epistemology, architecture must turn to other disciplines for authority, and the third myth is that designing a building is a form of research in its own right. The first does not allow interdisciplinarity, the second nullifies the authority of the discipline itself, and the third eliminates the research on the processes that lead to construction, and on post-occupancy.

In order to develop an evaluation of something so complex as the quality of architecture, we need a solid theoretical framework that help us to explain the different interactive relationships that are established in a specific context. A theoretical model that does not simplify the analysis dividing the physical factors from the social ones, a model that is not based on the metaphysics of architects and critics. What concerns me in this paper has to do with how and why cities took the shape they did. Which is to say that I am not engaged with form in the abstract, or with form studied for its behavioral possibilities, but with form as a receptacle of meaning. According to Spiro Kostof architectural meaning is ultimately always lodged in history, in cultural contexts. (Kostof & Tobias 2009)

### 1.1. A Dialogical Model for Architectural Research

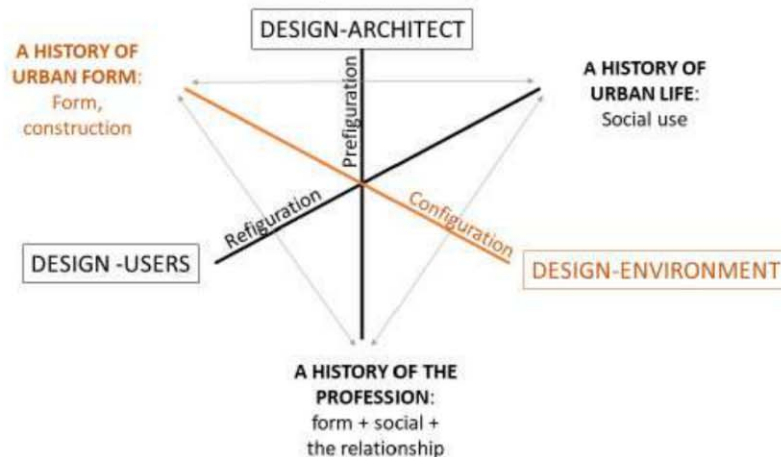
This evaluation can be done from a dialogical approach, based on the chronotope of Mikhail Bakhtin (Bakhtin 1982) which has already been extensively developed in the architectural research by Josep Muntañola (Muntañola 2016). It means to explore architecture from different voices and points of view, by analyzing the interplay between the following interactive relationships: the relationship between design and environment, the relationship between design and architect, and the relationship between design and user (see diagram I).

On the one hand, the analysis of the design and the environment should be related to the history of the urban form of each specific physical context. On the other hand, the studies about design and users should be connected with the history of urban life, with the social and cultural context. And finally, the relationship between the design and the architect, should be explained through the connection with the

history of the profession, with the cycles of architectural activity and with the problem of how a specific architectural work is introduced in its intellectual context.

The hermeneutic model of Paul Ricoeur, identifies the same three "axes" in architectural research. The first is the configurative architectural knowledge that analyzes the object and its context, the second is the "refiguration" that focus on social use of space, and the third, the "prefiguration" based on the ideas of the designer. With this model we can think about the present from the past and the past from the present, in a constant and retrospective dialogue. That is a hermeneutic relationship between what could be and was not and what happens, or between what remains of what was and is not taken into account, to understand the present with its contradictions.

From this complexity of the analysis, which I am developing as PhD dissertation with the case study in Morella, we will focus in this paper on spatial configuration. The urban form will be studied as a historical laboratory, that is, as a continuous experimentation, which at the same time set up cultural values, deep forms of communication. But to understand it, we have to look at it from the 21st century.



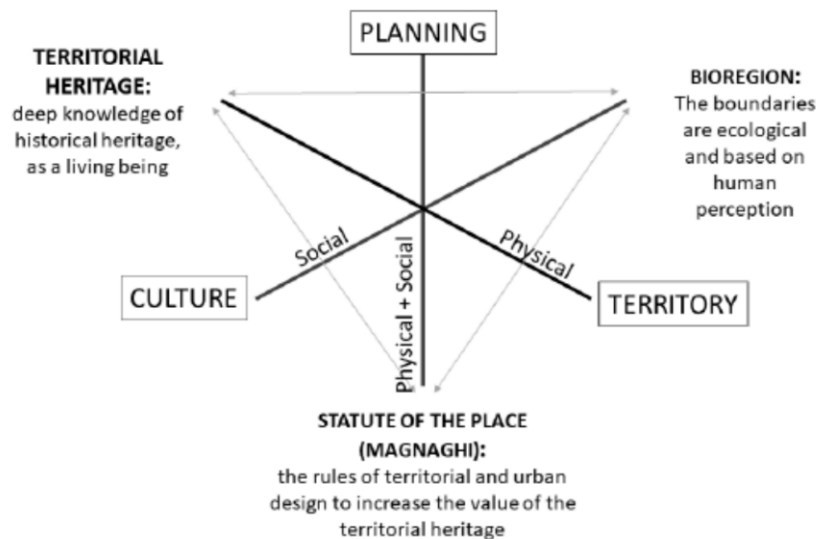
**Diagram I:** Analysis of interactive relationships in architectural research. Chronotope of Mikhail Bakhtin (1982).

## 1.2. Interplay between design and environment

Studying cities from a scientific approach let me find out the knowledge that I cannot perceive by a direct visual intuition. Different methodologies help us in the historical analysis as an accurate choice of historic maps and ethnographic reports, data previously gathered at a qualitative, interdisciplinary level, and the Space Syntax analysis, that arises from the interaction between mathematics, architecture, computing and social sciences. The purpose is not demonstrating that the constructed environment forces a certain action to architects or users, is to show that we can study the cultural values that the constructed environment configures, to learn to design better.

Analyzing the interactive relationships between design and environment, we can identify three topics: Territory, Culture and Planning. To study a territory (a historical urban landscape) means to define a territorial heritage based on the deep knowledge of the hidden historical heritage, but considering its character as a living being. The purpose of studying a Culture, in this case, is to define a Bioregion and its geographical boundaries, which can be different than the politic ones. These boundaries are ecological and based on human perception. Taking into account the territorial knowledge (physical) and the Bioregion (social), urban designers can define a planning strategy to establish the rules of territorial and urban design to increase the value of the territorial heritage. This is the "statute of the place" for Alberto Magnaghi (Magnaghi 2011). (See diagram II).

The Italian territorialist approach promotes a reinterpretation of authors considered forgotten to propose a possible utopia from the binomial approximation of heritage and territory, with the aim to fable complex iconographic representations, with the prioritization of citizen participation. A good example is the Territorial Landscape Plan of the Puglia region (2010), in Italy, directed by Alberto Magnaghi (<http://www.paesaggiopuglia.it/>). The empowerment, proposed by the Italian method to the local community, is useful to identify new territorial morphotypes that the knowledge of urban planners and experts had not observed. Consists on capture aspects of education and training the population through the implementation of activities and techniques to design territorial and landscape elements.



**Diagram II.** Interactive relationships between design and environment

## 2. How to study urban form and why?

There is a vast modern literature about urban form; how to make it and how to “read” it. Since Camillo Sitte’s *The Art of Building Cities* of 1889 and all those other books since then by the likes of Spiro Kostof, Lewis Mumford, Gordon Cullen, Kevin Lynch, etc., the professional eye of the designer has scrutinized urban configurations, and drawn prescriptive lessons from such scrutiny. In this paper, the urban form is analyzed by two different perspectives, the first based on the Italian typo-morphological approach, grounded on the legacy of Saverio Muratori in the 1950s (Cataldi 2013), and the second on space syntax, developed particularly in University College London by Bill Hillier. (Hillier 2014). Both approaches are being further developed in a wide international context, as theories as well as methods, but as we can see in the last international conferences, ISUFITALY in Rome (February 2017) and the 11<sup>th</sup> Space Syntax Symposium in Portugal (July 2017) the tendency of the two approaches is to face history and science. This paper attempt to bridge the gap between them.

The methodology used includes therefore the analysis of the urban form configuration from a historical approach and a space syntax analysis. The main methodological strategy to understand the historic urban form consists of a process of artistic and technical production based on the representation of the complexity of the territory and the transformations of the urban fabrics overlapping geographical, environmental and historical maps, and the current cadaster, in order to see what remains, what disappears and what is new. This allows us to understand the territorial structure from the present to the past, looking back to understand the meaning of the things, in this way we can identify the architectural characteristics of the territory and the specific qualities of the cultural and geographical environment of the city. As a result, we see that landscapes have genetic codes of identity. On the other hand, space syntax adds to traditional urban morphology methodology and proves to be extremely useful to study the programming and evaluation stages of urban design. A prerequisite shown in this paper claims the need for an accurate choice of historic maps and ethnographic reports, data previously gathered at a qualitative, interdisciplinary level.

### 2.1. Morphotypology and artistic principles

Morfotypology is a synthesis through an iconographic representation of the morphological and typological dimensions interrelated. By the analysis of Urban Morphology, we can represent the elements that highlight the formal characteristics of places in their individuality. Moreover, an analysis of the typology makes evident the formal characteristics of places that are repeated in more contexts and in time.

From a territorial scale, by visualizing the aerial photographs of google maps we can easily identify urban morphotypes. A good example near from Morella are the villages: Ares, Cantavieja and Castellfort (Fig.1). These places have some formal characteristics in common: to be disposed in a topological way along the ridge, to have the access through a single main road, etc. Although they belong to two different administrative regions, Castellón and Teruel, they are part of the same mountain system, the end of the Iberian system. But we can identify this morphotype in Italian cities as Vitorchiano, in the region of Lazio, and it is because there is a common principles of design behind these settlements.



**Fig. 1** Ares, Cantavieja, Castellfort and Vitorchiano.

The purpose of this analysis is not to establish a classificatory model. My contribution will show how to discover some important generative rules that explain the current spatial configuration of the city, whether geographic, cultural, sensorial, etc. How to demonstrate that form is a receptacle of meaning, that we “read” form correctly only to the extent that we are familiar with the precise cultural condition that generated it. Kostof pointed out that the more we know about cultures, about the structure of society in various periods of history in different parts of the world, the better we are able to read their built environment.

There are lots of types of cities on the ground, such as settlements disposed in a topological way along the ridge, on the plateau in the land, on the slope of the hill, etc. Talking about the concept of “Type” Saverio Muratori says: *Non si tratta di un concetto didattico nato dall'arbitrio di un classificatore, ma di una realtà umana innegabile, risultato di uno sforzo comune di creazione, dal cui ceppo germogliano le singole opere come fiori e frutti vivi di una propria originale individualità, senza rinnegare i valori vitali comuni. Il tipo così inteso non è più la serie standard del positivista né la varietà biologica fissata una volta per tutte da un determinismo meccanico...* (Strappa et al. 2003).

In addition to the characteristics given by the geography that determine a typology, it is fundamental to identify some artistic principles in the art of urban form. Urban design is of course an art, and like all design it does have to consider human behavior. In *De re aedificatoria* León Battista Alberti observed that since Antiquity, two types of urban form had been used for shaping urban fabrics: the orthogonal-grid form and/or the semicircular form. These two main types of form used for building the geometry of walls and ditches, are still visible today in the skylines and the perimeters of most urban fabrics in Europe. To historically support his taxonomy of urban forms, Alberti analyzed form in terms of social cultural and artistic content. He wrote that without the physical urban scenarios, urban life in newly-founded communities would not have been possible. Schemata, methods and mental models were powerful decision-making tools which he used for understanding the meaning of the visual arts in general and the symbolic meaning of urban form in particular. Morella is a walled city located in the slope of better solar orientation of a hill and has a castle on the top. The city has a semicircular form, an urban layout of concentric perimeters. (Fig. 2)



**Fig. 2** Ortophoto and map of Morella

## 2.2. A Territorial Morphotype

A Territorial Morphotype is characterized by the formal interpretation of the relationships between the urban fabric and its environment. Thanks to the old fortification walls, the gates, the streets, etc., we know that there was a total architectural and urban interaction between the design inside and outside. There was a link of interdependence. Magda Saura (Saura 1998) says that people were forbidden to build houses attached to the fortification walls and were only allowed to enter through the gates of the ancient city for a few hours during the day. Therefore, people were aware not only of the security the defense walls offered, but also of the kind of use they were able to make of these architectural structures. Use of space was regulated by law. The physical aspect of urban settings can only be meaningful in this context, when they are studied together with the legal codes that ruled people's behavior. Alberti considered town planning to be a product of making, a human activity, a mental construct. He knew that since Antiquity, people had been aware of the role of building laws in defining the use of urban space. In Early Renaissance, people continued to be represented on city councils and were able to approve or reject an architectural design project if it did not comply with codes governing the use of urban space. The separation between countryside and city in different units of analysis makes more difficult the understanding of the urban form. Spiro Kostof already pointed out that in the history of cities, the organic fallacy cannot account for spontaneous urban growth, unconscious or unplanned urban design (Kostof 1977). As Aristotle recorded in his urban theories, Persian know-how was inherited in Ancient Greek town planning, and was carried through the rest of Europe through the ancient institution of the Roman cadaster, dividing private and public property. Originally the purpose was to collect taxes from agriculturally, zoned land, and this ancient planning tax policy still exists in many countries. A part of the Italian Muratorian school defends that all the territory of the Empire was planned from a grid of 720 x 720, the Roman cadaster. I have developed a hypothesis of centurion in the territory of Morella from the current cadaster and this grid. (See figure 3)



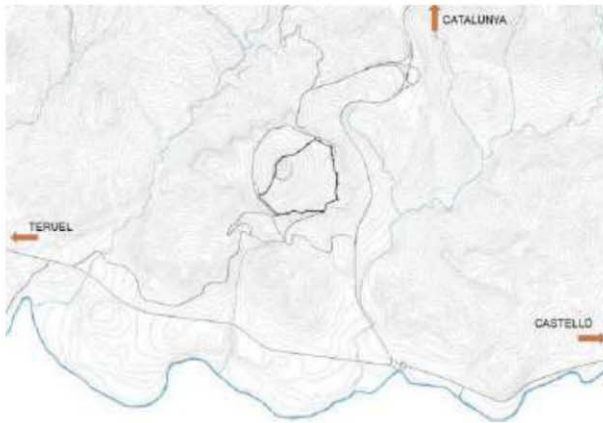
**Fig. 3** A Roman cadaster hypothesis in Morella

On this hypothesis, we find a Roman logic because the grid is perpendicular to the Bergantes river, where there are the most fertile lands. Moreover, this grid is aligned with the castle's shape, and with the layout of some of the main streets of the city. Some members of the Muratorian school have questioned this provision of the cadastral grid in the high mountain territories, where there is almost no plain near the rivers, and where the current logic of the property is very complex due to the rugged topography. The archaeological evidence shows that since the Neolithic period the rocks at the top of the hill where Morella is located has been inhabited. This place is a strategic point of control on the land, and I am sure that had been an important location for Romans. But, provably there was not a Roman city, there was a camp under the castle.

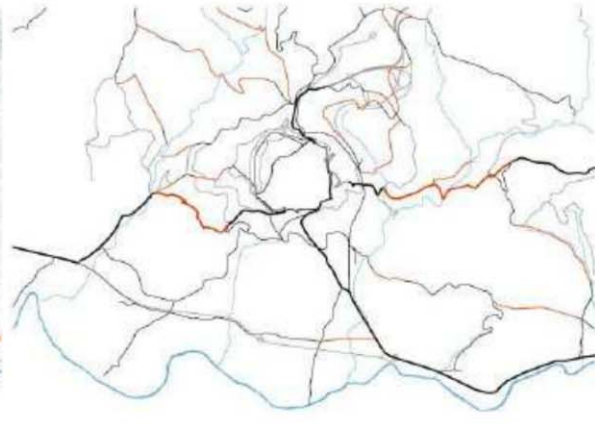
Traditionally has been emphasized a medieval origin of the urban fabric in Morella (Alanyà i Roig 2000), because its settlement can be identified with the morpho-typological model of medieval settlements of castles and walled cities on top of the hills, located on strategic points of the territory with high visual control, by triangulation, with good defensive conditions before the probable attacks due to the frequent confrontation between peoples. But Morella has probably a hidden Roman design.

Morella is located at a crossroads, at the boundary of *Comunitat Valenciana*, very near from *Catalunya* and *Aragón*. For this reason, has been a wonderful point of control, strategically located from a military point of view (See Fig.4). Figure 5 shows the overlapping of a military map form 1910 with the current road structure. In red we can see the roads that have disappeared, in gray the new ones and in black the ones that have remained. We see that the triangular structure of roads is modern, because in the

past there was a fourth important road, which even corresponds to a gate of the fortification wall that was closed.



**Fig. 4** Location of Morella, at the boundary of *Comunitat Valenciana*, very near from *Catalunya* and *Aragón*.



**Fig. 5** Result of the overlapping of two maps: a military map from 1945 and the current cartography. In red we can see the roads that have disappeared, in gray the new ones and in black the ones that have remained

### 2.3. Urban Morphotype

An urban morphotype is characterized by the formal interpretation of the urban layout of public and private space, streets, squares, etc., and by the relationships between them (Caniggia & Maffei 1979). I will attempt to exemplify the contribution that urban morphology can make to the understanding of historic urban landscapes in the current era of concern for managing historic cities. This research direction on which we chose to focus corresponds to the historical reconstruction of the physical form of urban areas and it is supported by a diverse set of data sources, such as fieldwork in existing urban tissues, the analysis of old maps, the study of historical documents, and archaeological work. Crossing different scales can be very useful when analyzing the structure in order to search for the oldest streets of the city (*Il percorso matrice*). There is a correspondence between main streets of the city and main access roads. Moreover, in Morella the old gates of the fortification walls are located at the meeting point between the main streets and roads (see in figure 6). In this map of the building types of this town, priority is given to historical periods, and these are morphological periods – periods having unity in terms of the physical forms that were created.

An aspect of plots was their dimensions. These can be subjected to metrological analysis, which affords an important means of reconstructing the histories of plot boundaries. For example, by analyzing measurements of plot widths, are able to detect regularities, speculate about the intentions of the medieval surveyor when the town was laid out, and infer the original plot widths and how they were subsequently subdivided or aggregated. In figure 7, in number 1 we can see how the street *Mare de Déu* in Morella was formed with regularity of plot widths, of approximately four meters, and the old palaces in the street are probably the result of the purchase of three consecutive plots. Another aspect of plots was their shapes. Residential plots are likely to have been created as a series of rectangular shapes, which is the norm for plots in a housing area. So when we find irregular dividing lines, we assume a growth of the plot. Usually dividing lines are perpendicular to the first façade of the plot. In the number 2 of the figure 7 we see an overtaking of the plots on the street. It appears as a continuous porch on the street *Blasc d'Aragó*. On the other hand, in number 3 we see an alignment of plots in different blocks, and when more than three lines are aligned it seems to me that it cannot be casual. The main hypothesis is that there was a street that was closed in the past. These three hypotheses are only three examples to see the potential of information that the cadaster keeps as memory in the form. Another important source to the historical reconstruction of the physical form of urban areas is the study of historical documents. In the Historical Archive of Morella we found some documents of the late 18th century, about the construction of a neighborhood. (A.H.N.M.,1128. page 2015 v. 4/11/1793). The process of creating housing plots began in 1789, when a rural property within the old fortification walls was sold in order to build to houses. The historic document specifies the dimensions of the plots in rectangles of 26x40 spans. This structure has remained until the present, as we see in Figure 7 (number 4) although was destroyed and rebuilt after suffering major damage in successive wars.



**Fig. 6** Urban morphotype of Morella: medieval structure of streets and plots.



**Fig. 7** Historical reconstruction of the physical form of urban areas. 1- Metrological analysis of plots in Morella, 2- Overtaking of the plots on the street, 3- a street that was closed in the past 4- Configuration of residential plots, described in a historical document.

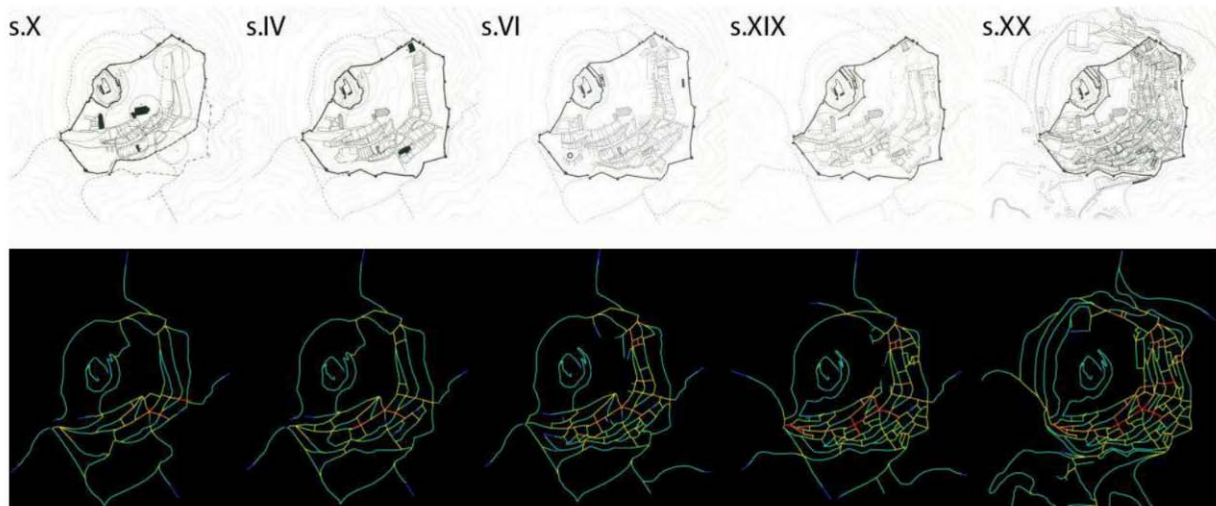
### 3. Space Syntax

The architect needs analytical tools, which incorporate geographical, historical, aesthetic, psychological and social knowledge, of an interdisciplinary nature, that help him to understand the vestiges of the past in the present, to anticipate local and global impacts of any urban or architectural change. Space Syntax arises from the interaction between mathematics, architecture, computing and social sciences, as a theoretical and practical tool, which can be used to systematize millions of data and to help us to detect results of negative impacts. However, concepts of social integration of and connectivity only prove useful when they are considered at the programming, early stages of the design process, only with accurate, historic mapping sources. According to Bill Hillier, objects can be considered, first projected and then used, as repositories of knowledge, or as configurations.

In figure 8, the black maps are developed with Depthmap, the computer tool of Space Syntax, to see the probability that pedestrians and drivers would choose one way or another, and which public spaces and parks have the greatest and least provability of being used. The color scale illustrates the results, with blue the least likely and red the most likely. This map captures the essence of Morella: people moving and interacting in space, sharing, creating and innovating; a social and economic network, played out in streets and public spaces. The map illustrates how the starting point for Spaces Syntax's studies is the interaction between public space and public life. However, the way information is presented is not city life and situation at eye level, which is typically the case for public life studies. Rather space syntax represents a more technical, logical and abstract version of public life studies.

When applying the Depthmap on the hypothesis of historical growing of the city of the art historian M. Julià Torné (Julià i Torné 1993), we see that each new street that appears modifies the complete structure of the city. The disappearance of a historic road that arrived from countryside affects the entire streets structure. What Bill Hillier teaches with Space Syntax is a demonstration of systematic topological transformation in any transformation process of the city. Another type of transformation could be studied, but the interesting thing about Space Syntax is that it is a specific tool that measures changes, not in an intuitive way, but in a more scientific way, from a systems theory. The topological degree of accessibility of the urban structure is therefore not only intuitive, the computer analysis with the Depthmap program is useful in this case to systematize what we had seen with the previous analysis, overlapping historical maps.

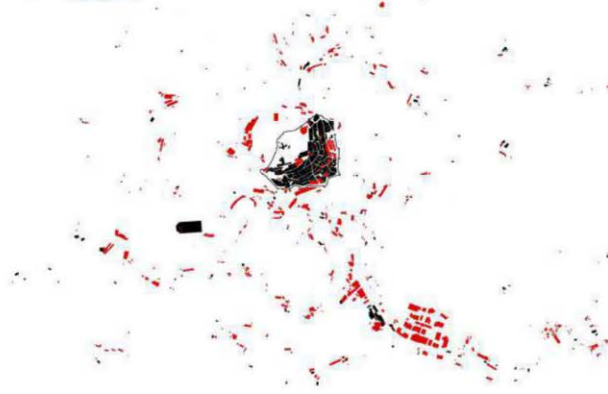




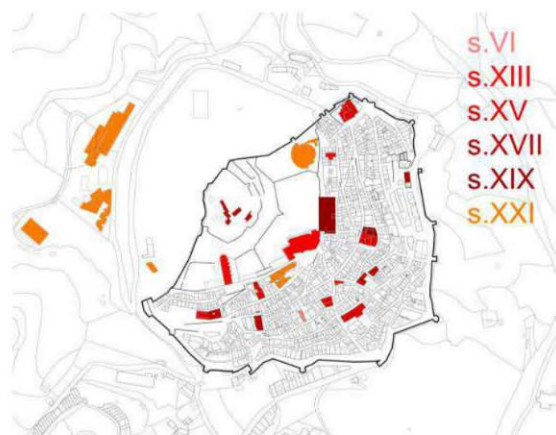
**Fig. 8** Depthmap analysis on the hypothesis of historical growing of the city of the art historian M. Julià Torné

#### 4. Public buildings and the city

1945 2017



**Fig. 9** Análisis del crecimiento de la edificación desde 1945 hasta la actualidad.



**Fig. 10** Análisis de los edificios públicos de la ciudad a partir de la época de su construcción

Between 1945 and 2017, although the population in Morella has declined from 4,070 inhabitants to 2,500, the volume of new building that has appeared in the territory around the city is important (See Fig.9). Public buildings historically were part of the main streets of the city, from the 6th to the 19th century all urban life was within the old fortification wall, but in the last 30 years have appeared some public buildings around the public promenade outside of the fortified core of the city.

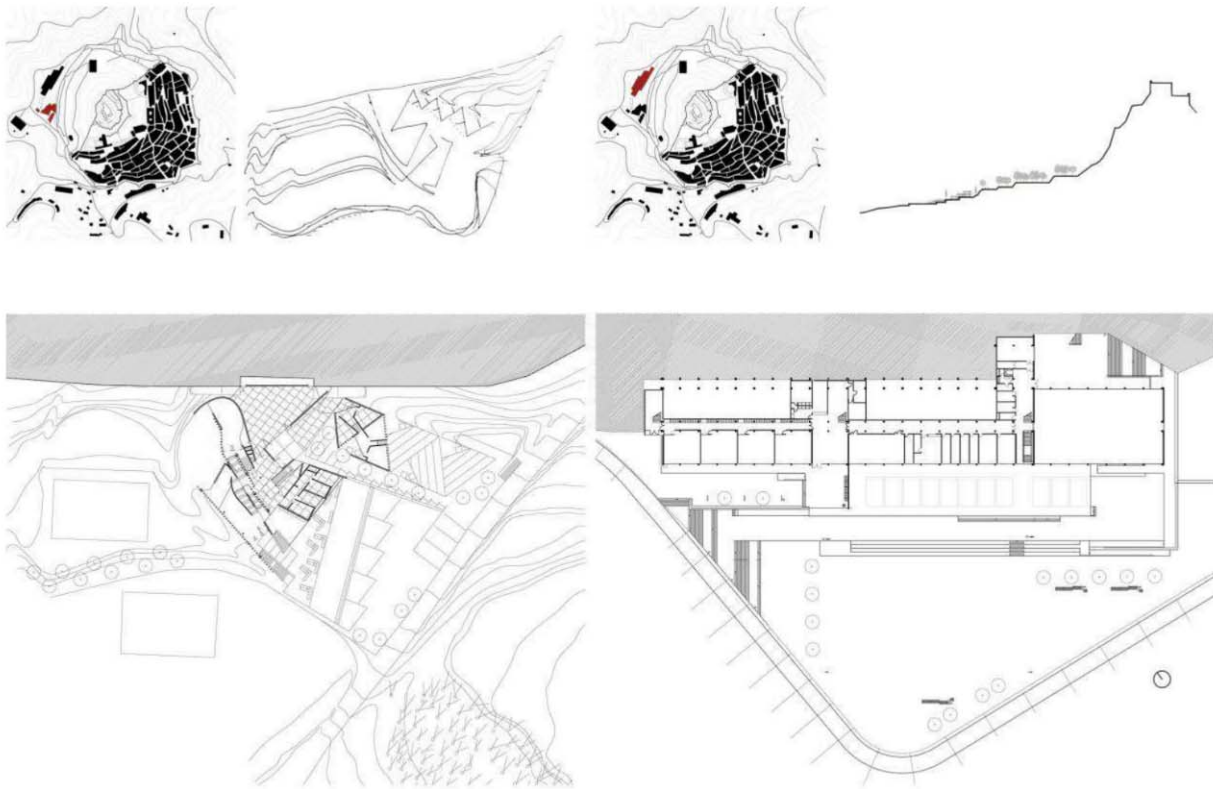
The primary school of Enric Miralles and Carme Pinós (1986-1995) and the secondary school of Helio Piñón and Nicanor García (2001-2007) are two important public buildings located in Morella. In the primary school, the architects had the difficult task of design a building outside the fortification walls that envelop the city, in front of the landscape, the topography of steep slope and the castle, when the Valencian heritage administration had already ruled out a project because it was considered that it did not respect the historical value of the city. After few years, the Secondary School had the same conditions and one added, the School already built in the neighboring lot. They are two important buildings for the city that write a new stage in its history and for its inhabitants. They revive with their differences an architectural debate on the relevance of different ideas in the design such as: the historical and social context and the commitment with the International Style; about starting each project from the place and using criteria of economy, means and resources; on memory and logic; about the work that is lived and the work that is explained by itself; about the perception with all the senses and the importance of the visibility, etc. They are two very published works that once again place Morella in present, opening the debate between architects, users and the general public about the good architecture and the relationships that it establishes. The relevance to compare these two buildings of Morella, as two archetypes, is not the objective of this communication, but this work has been published recently (Beltran 2015).

In this paper we are focused on the relationship between the shape of these buildings and the shape of the city. The history of urban form can be used as a design quarry: it has routinely so been used. I think there is certainly nothing wrong with architects and planners being inspired by the old townscapes. That is, in fact, the professional's gift; catching the distinctive quality of a street or a public space, being touched by it, wanting to incorporate that quality into their own designs. They do not need a historian for that. Where this mining of the past becomes objectionable is when the designers ascribe certain rationales to the forms he or she admires, rationales which are either innocent of history or else casually misrepresent it.

The primary school designed by Miralles has triangular shapes that remind the square of the Church Santa Maria of Morella, situated at the top of the city. From a corner of the square there is a great staircase that comes across all the main streets and communicates the square with the lower part of the urban form. At the school, there is a ramp that goes through the entire project from the highest part where there is the main triangular room, considered the most public space in the school, to the lowest level establishing a relationship between all the parts of the project. The architecture of Miralles is made to emphasize the actions of the man; to enjoy the light, the space, the views, and to attract the physical sense of the movement. The detail scale is a smaller representation of the general conception of the building that reminds to the specific place. Some details of the school remind rocks in the castle, with its cracks, the balconies allow looking the movement of people above, as in the city, etc. The relation with the history of place is an assimilation of abstract and vernacular.

On the other hand, Helio Piñón saw that the logic of the city was given by two directions, one that follows the contour lines and another that follows the slope. Thus solved the program with horizontal corridors and vertical stairs. H. Piñón explains in an interview about this project: "*When communicating these planes in a transverse direction with stairs, spaced regularly, we arrive at the same solution that the first neighbors of Morella adopted when they decided to settle in the southeast slope of the hill that they had decided to crown with the castle*"

The references between Miralles' architecture and the configured form of the city are not obvious. The relationship between the square of the Church Santa Maria and the triangular polyvalent hall of the school, between the staircase San Juan and the ramp that divides and organizes the School, etc. The new design establishes relationships with the physical memory and social memory of people, between what they already know and what is new. In the secondary school this relation is not physical or social. It is a result of the logical organization of the historic streets. These streets were designed following the contour lines of the topography and were communicated by vertical staircases that came across them. In the case of Piñón's design, the main conscious relationship is with the history of the profession, with the International Style, and this school is possibly one of the last works that represents it with great fidelity.



**Fig. 11** Dos equipamientos fuera de la muralla: la escuela-hogar de Carme Pinós y Enric Miralles, y el instituto de Helio Piñón y Nicanor García.

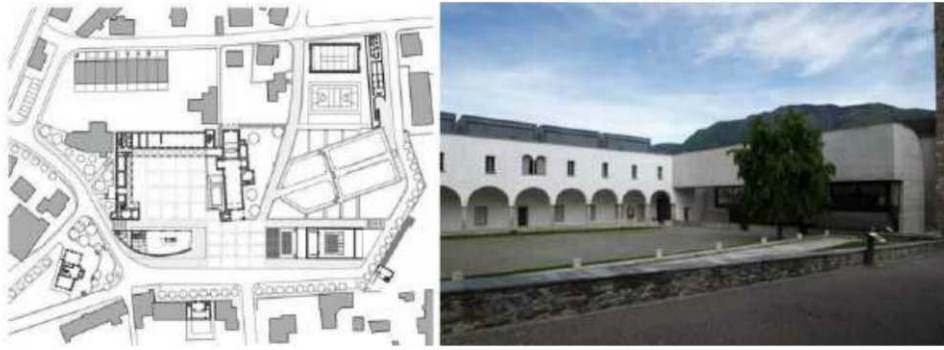
But in this study and as Mamfredo Tafuri says, the works chosen are irrelevant in themselves, and have meaning only by the way they relate to the problem, which in this case is the growth of the urban form. "In order to deal with the problem that lies behind the work, the historical must forget every prejudice about its quality" (Tafuri 1995)

The question is: Designing the new public building outside the walled city contributes to improve the relationship with the environment? The two buildings propose a reinterpretation of the landscape, are located below the castle and the park, and therefore we can say that its main façade is the roof. Inside both buildings have open classrooms facing the landscape and, given that they are two buildings for teaching, this contributes to the interaction of the inhabitants with their territory. But in both cases the site was already chosen by the local administration and by the planners who determined the planning, not by the architects.

It should be noted that the Colomer-Zurita building of the 19th century, located in a very central place of the city next to the Arciprestal, which was until 2003 the school and the institute, and until 2007 only the institute, has been abandoned without use. It is obvious that having a huge abandoned public building in the heart of the city is a problem, so there have been many ideas to turn it into a cultural project: new library, auditorium, university headquarters, congress center, student hostel, etc. So far, none of them have been developed due to the large size of the building and the financing problems. Analyzing historical photographs of the building we see how this public building was used periodically for some celebrations and rituals in the annual calendar of Morella. These uses were fully compatible with school activities. Why was not it rehabilitated as a school?

In 1977 the town of Monte Carasso, Switzerland, needed a school and asked for the project of a new building to Luigi Snozzi. The master plan in Monte Carasso had planned a lot on the outskirts of the city, but the architect thought it would be more appropriate, always thinking about the city, locate the public building closer to urban life and made the proposal to recover an old convent to locate the new school. He actively participated in the Monte Carasso Town Planning Plan, which was finally approved in 1979. For Snozzi, the historic city once again proposes as a fundamental value the importance of the site in all its geographical, physical and human components. Participate actively in the project of the new city. History thus becomes one of the main materials of architecture.

Architectural research intersects different forms of knowledge, often being between the natural sciences and the social sciences. According to Aristotle, architecture, education in general, and the urban and social rules of the polis share the same type of knowledge strongly related to ethics, or with the capacity for dignified and virtuous human action, defined as "phronesis" or practical wisdom.



**Fig. 12** Primary School in Monte Carasso, Suiza. Architect Luigi Snozzi, 1977-1979.

## 5. Conclusions

On the one hand, what is demonstrated in this analysis is the dialogics of the configurative form. As we have seen, it is impossible to divide the analysis between physical form and social use. The relationship is of interdependence, physical form influences social behavior and precise cultural conditions influences the design of physical form. The theoretical framework is useful in architectural research to assess the quality of architecture, because helps to remember the complexity of the analysis and to put it always in context. But of course, the theoretical framework is enriched by case studies, and can lead us to contradictions that make us modify theory, so there is a feedback.

On the other hand, what concerns me is to know how small historical villages can not only survive as evidence of an extraordinary architectural civilization but, how they can achieve their own alternative development to the metropolis. The proposal is to put in value the architectural, territorial, environmental and landscape heritage and to find the rules for the design, only useful for each specific place. It means bridging the gap contemporary design and history. There is no quick, easy way to appropriate the past. Walking in an old town center, sketching it and thinking about it, is instructive in a direct way. It is the first and indispensable step. But it will not tell us what really happened until we turn to the archives, the history books, the old maps, until we assemble all the evidence, some of it often contradictory, that will help explain how a particular downtown got the look it now has. This complex analytical procedure developed can help to rediscover roles, functions, instruments of government and creative reactivation of the relationship between Morella and its territory. Space Syntax proves to be useful to check which interactive relationships promote new interventions in historic places and which deactivate. We see how this tool can demonstrate that a small change in urban form affects the entire city. Furthermore, it can be useful during the design process, not to design, but to see how designs improve the city.

The main idea is to demonstrate that the study of the historical configuration of urban form helps the architect to make better decisions, and does not represent a limit to creativity, but paradoxically gives more freedom. The historical perspective helps the architect's intuition to understand what cannot be done in the place, to predict possible future dysfunctions in urban life, and this requires a commitment of the architect with the place and with the city. That is, the architect must be involved in politics and in the definition of policies. To understand the present and to imagine its best possible use in the future is ethical, because in the cities everything is full of history, and this can never be ignored.

In this paper I am not engaged with the speech of the architect, with the ideas he wants to communicate, with the perception of their ideas by users, although all these subjects are very interesting and useful for advancing research in architecture. But what is shown is that an architectural design can seduces us, and at the same time may not improve the relationship with its socio-physical context on an urban scale. The arguments that are useful to support the relationship between history and project at the architectural scale, are not useful analyzing the urban scale.

Finally, it can be observed that is necessary let the architects and the local culture experiment in order to introduce a specific modernity, without forgetting that, although there are many alternatives, it is demonstrated that they are not arbitrary. We prove that a critical distance is necessary to be able to analyze if the innovations that have contributed to improve the city. The whole configurative structure is always a balance between the introduction of changes and the preservation of tradition and local culture. Cities are like an enormously complex machinery that on the one hand drive innovation and on the other hand slow it down. If they drive only innovation, the city disappears, but if they push only the tradition become a museum. And a dead city cannot be a good museum.

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