

# Small Historic City Centers of Mediterranean Europe: Critical Points and Potentialities for Environmental Sustainability



Valentina Pica

**Abstract** Conserving historic urban environments with a multidisciplinary and integrated approach is currently one of the most universally urgent and challenging cultural heritage conservation issues, that also deals with environmental sustainability. More specifically, Southern Europe small towns are progressively being abandoned, while they should be preserved with integrated studies and interventions, oriented to innovative solutions. The current conditions and historic resources of the Albaicín quarter of Granada (Spain), as well as of other small historic city centers in Italy, are being pointed out. A method for a comprehensive recovery plan approach of these centers is proposed, that should start from a territorial analysis, throughout different steps, such as: identifying existing assets; historical studies of their evolution; mapping and general classification of the built heritage; study of the accessibility of the historical center's sites; a deep analysis of their critical points and opportunities and a critical valuation of the existing planning regulations. It is also important to outline the common mistakes which are being currently made, in order to apply corrective measures in the next future, based on a kind of "peer to peer" urbanism. This paper also argues in favor of numerous international projects, aimed at the renewal and resiliency of small historic Mediterranean centers, in order to foster good practices in their conservation worldwide.

**Keywords** Small historic centers · Recovery plans · "Peer to peer" urbanism · Integrated interventions

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## 1 An Integrated Approach to Small Historical Centers Revitalization

The continuous and fast transformation of our modern cities have been carrying out relevant issues on environmental sustainability. According to the Charter of Cracow (2000), historic cities conservation is a urgent topic. The Charter states that “*Historic towns and villages, in their territorial setting, represent an essential part of our universal heritage, and should be seen as a whole with the structures, spaces and human factors, normally in the process of continuous evolution and change*” [1]. Scattered heritage should be politically considered a huge resource for European territorial revitalization and cultural tourism growth, while at the moment it almost consists of a problem to be solved, moreover in Southern Europe, the poorest part of the EU. This region presents one of the richest scattered heritage in the world, but this is very fragile and is under threat, because of its degradation, due to political and economic needs, and the seismicity of this area. The current reality is that its small centers’ traditional buildings haven’t been rigorously mapped and requalified and are progressively being abandoned because of their marginal locations, far from the biggest cities main services. A first mapping and management tool of these historic centers at risk has been realized recently in Italy [2], but is not completed and the lack of an accurate map of the urban fabrics of the marginal small city centers is quite known, and is not even contemplated in the Heritage Risk Chart, the GIS tool of the Italian central government administration [3].

Moreover, European rules, and more specifically the Directive 2010/31/UE, don’t require that these fabrics be retrofitted in order to preserve their historical value [4]. Nevertheless, over the last three decades there has been a marked trend to the rehabilitation for residential use of historic city centers, art heritage cities and areas with a particularly high concentration of historical assets and local traditions [5]. For a few years there has been an increase of the attractiveness of the Italian small historic city centers, those with less than 20.000 inhabitants, which are the majority of the urban settlements in Italy.

In Spain and in other European Countries on the Mediterranean basin, like Greece, there are similar urban and rural historic assets. They are, like in Italy, the object of a new residential demand, partly due to their environmental value, which have been largely preserved from urban and industrial development.

A recent research carried out on the historic small city of Fermo, in the Italian region of Marche, and directed by the urbanist Luigi Piccinato at the Department of Architecture of the Roma Tre University, shows how the main characteristics of small historic centers guarantee an optimal quality of life, thanks to the social, economic and other intangible assets that they can generate [6].

Nowadays, the valorization of the historic small towns under marginal conditions, situated far from the biggest cities, and the monitoring of their attractiveness in order to preserve their architectural characters, mean a challenge shared between the workers in the sector, the administrators and the private stakeholders.

These ones are increasingly preferring to live in small peripheral towns with a healthy and well conserved natural environment. They can be persuaded to move out of the biggest cities on condition that small centers can be provided with the necessary facilities and services.

Nonetheless, these private actors who are looking for a better place to live are increasing but they aren't a large number yet. Therefore, it is time for the scientific community to pay attention to the several stakeholders in order to create projects for the small historic centers' revitalization. These actors can be external investors, small, medium and big local companies, associations, and can be involved into collectively managed and crowdfunded events, or experimental workshops and working tables, in collaboration with local administrations.

### ***1.1 Method Issues***

Adopting an integrated model of development strategies in order to preserve small historic centers of Southern Europe and to contribute to their revitalization is necessary. This model should be grounded in historic urban fabrics conservation, in the valorization of cultural environmental heritage and in the cultural identity issues, in order to contrast the marginal conditions of the majority of these small towns. In the case the environmental plans and the special projects of revitalization of these marginal areas are successful, coordinated intervention programs must be foreseen in order to protect their environmental and architectural beauty.

Contemporary technologies and research methods allow to propose efficient solutions with relatively low budgets. There are several instruments nowadays, such as energy efficiency retrofits and Smart City planning parameters, which can be tailored to small towns [7]. It is important, therefore, to contribute to the creation of a shared method based on integrated intervention strategies in a multidisciplinary framework (urbanism, architectural planning, conservative planning, historical analysis, urban codes and administrative rules, etc.). This method should start from a territorial analysis, based on digital tools like a GIS database, and should be realized throughout different steps. Firstly, it is important to identify and analyze the existing assets, in order to develop complete historical and critical studies of their diachronic evolution. The operative basis of this kind of analysis includes the typological study tools of the urban fabrics determined by architect Saverio Muratori and his school [8].

Therefore, it is basic to realize the mapping and general classification of the built heritage and existing infrastructures, with the study of the accessibility of the historical center's sites. Finally, it is important to include a deep analysis of the critical points and opportunities and a critical valuation of the existing planning regulations in these historic centers, the majority of them being located in regions of high seismic hazard, moreover in Italy [9].

This analysis has to be guided by a full recognition of the development and improvement opportunities, in order to create useful resources to the revitalization of the analyzed historic centers and their environment.

Various tools of Landscape Sustainable Design, which have been developed over the last few decades even in the Permaculture discipline, can be applied in order to create team building, problem solving, and to study systematically all the weaknesses and the strengths of each part of every project [10].

It is an holistic approach, which empowers people for historic centers requalification, and can become the central corpus of an innovative and organic method for urban restoration, carrying out projects from a broadened perspective.

Small historic centers won't be conserved without taking into exam their surrounding landscape, and this line of work will contribute to their well regulated "smart growth".

At the moment, complete recovery plans of integrated interventions grounded in a holistic management of sites and their surrounding context and oriented to this "smart growth" and regeneration of small historical centers, haven't been defined yet. Although the recent realization of several innovative scientific studies [11] and research projects [12], the most significant being the *SmartPolis project* at the BHLab of the ITABC of the CNR [13], as well as the setting up of pilot projects [14], these recovery plans aren't always comprehensive, as they are often conducted from a sectorial perspective.

Nowadays, operative proposals based on a rigorous and shared method are almost inexistent, in the framework of urban restoration, not being those which have been formulated over the past decades fully exhaustive and accepted among the various stakeholders.

Local and central policies focused on an effective multidisciplinary intervention plan development are also absent, while they are necessary for the protection of small historic centers and their landscape.

In Italy, the most universally known country bound to urban recovery, since the first legislative system, which have allowed to establish a definition of the concept "protected historic center", came into force (which is called Bottai Law, nn. 1089 y 1497 of 1939) until today, after more than 70 years, the disciplinary debate on this issue has highly evolved.

The fundamental steps of this debate have been marked by the administrative machinery in the Gubbio Chart in 1960, with which is established for the first time the necessary acknowledgement of a preliminary typological classification of the historic centers, including the urgent individualization of the areas which shall be rehabilitated. Then, the law 457 of 1978 has determined the funding by consistent sums of the recovery of historic heritage and has introduced a specific urban planning tool, the Recovery Plan, although it has not stated the clear respect of restoration practices.

In view of all this, an historic center is actually known in Italy and in Southern Europe, theoretically, as a cultural, economic and social asset to be preserved and revitalized, for its characteristics of urban area with a fragile scattered heritage,

with a specific identity and high historical value, both referring to specialized buildings and domestic ones [15].

Nonetheless, the practical and full application of the statements and guidelines of this philosophic and theoretical framework are still almost absent. Besides, there are several denounces of the distance between the world of architects and planners and the real needs of the citizens, the public administration and the legislative system [16]. Furthermore, the long time that it takes to realize recognitions, to make decisions and receive administrative answers may go further than the direct control of the projects.

## 1.2 *Sustainable Strategies and Virtuous Examples*

Within this scenario, it is arguable that an effective operative method of urban recovery should have an interdisciplinary approach and be of “macro design”, with interventions at several scales which can be calibrated on performance criteria and precise and flexible prescriptive rules, and adaptable each time to specific architectural “micro projects” [17].

It is a *work in progress* design procedure, which allows sustainability and effectiveness because of its cyclic closed loop, from macro to micro in a biunique way, letting the decision-making process be corrected at every step, if necessary.

The prioritization of the main measures follows this line, which is almost evolutive, and can be tailored to the reality and modified according to the local conditions, and the real needs of the stakeholders.

It is not about proposing a dogmatic approach, by which decisions are warranted, but a reflexive and dynamic approach, which can define the complex connections between the different characteristics of built heritage in order to establish various levels of intervention. These levels can consist, according to the different circumstances, in simple conservation, transformation, requalification, new construction or demolition, without unuseful restrictions.

It is also important to investigate the possibilities to increase the attractiveness of small historic centers through a virtuous combination of urban interventions grounded in the “modulation of protection” [18], historic buildings restoration and new technologies application at a urban and architectural level. Within this process, it is important to understand at every step the needs of local customers and of external or potential stakeholders, in order to optimize time and resources.

It is fundamental to propose guideline methods that can be related to technicians and to the administrators, who can interpret them critically in order to realise virtuous projects.

A valid line of interventions that could be followed or integrated within this framework is that of the “scattered museums” criteria, following the example realized by Giovanni Manieri Elia and Alessandra Centroni in the small historic center of Arsoli (RM, Italy) [19].

The experimental projects managed by Scalora and Monti following these guidelines on the historic centers of San Giacomo, Ascoli Piceno, S. Erasmo en Gaeta and Paganica, after the heart quake of Aquila on April 2009, deserve to be quoted [20]. In all these projects the morphological analysis of the historic city is useful for creating good diachronic (it means of the evolution of the multi-layered city) and synchronic observation points, which allow to analyze the several constructive phases that are present at the same time, as well as for carrying out comparative methods, which correlate the historic urban fabric of similar small centers located in different countries.

The general aim of these experimental projects is that to critically elaborate reconstructive hypothesis of the shape of the historic centers in its principal evolutive phases, from the study of static configurations to dynamic ones.

These hypothesis can provide a useful database for the formulation of the shared guidelines in order to foster sustainable processes, through a comprehensive operative framework valid for technicians, urbanists, stakeholders and administrators.

These guidelines can also be largely distributed among the customers and towards a larger public, in order to attract investors.

There can be created different documents that can be shared worldwide, in order to elaborate web forums, online laboratories and opinion-making blogs. An important example of webpage with open source documents has been created by the international project HISTCAPE, of the programme INTERREG IVC, financed by the European Regional Development Fund. It promotes sustainable ideas and methods for environmental and cultural revitalization of small historic centers worldwide; moreover, it fosters the development of local economy and of small businesses targeted at local customers, as well as social participation in the historic fabrics reuse, through horizontal governance, involvement and empowerment of the community on local cultural heritage management. These issues are disseminated through specific open source publications [21].

Nowadays social re-use is not diffusely contemplated yet in Southern Europe, while it can be an effective device to fulfill the administrative and political gap of funding recovery interventions, by activating new forms of financing, like crowd-funding, based on platforms for fundraising. Crowdsourcing platforms as well could optimize economical resources, because specific interventions could be tailored to the real needs of the stakeholders, and this would be the basis of a “smart growth” of this kind of settlements, which should be regulated by specific guidelines for the historic housing protection.

It is an experimental approach, and it fosters a new model of heritage management based on a bottom-up process [22], a social sustainability and participative model of planning, also called “peer to peer” urbanism. A successful example of “peer to peer urbanism” application is the Artena Project, in central Italy [23]. The entire initiative works through participation and public engagement and it is fully bottom-up. It achieves its goal through self-financed sub-projects, which also financially support the whole initiative. The project aims to design the physical, virtual, and socio-economic space of the city, believing that every space has

“bio-political” value. Whether it is impossible to go back to a rural civilization, it cannot be denied the need for recovery of environmental as well as urban and socio-economic characteristics, still preserved in Italian villages, with the aim to improve the quality of our lives. A new socio-economic network around heritage could be activated by this line of interventions, based on considering historic centers as a resource and an opportunity for territorial and social development.

This kind of approach raised within the framework of heritage reuse and energy building retrofitting, both promoted by the International Community after the first crisis of oil in 1973 (see the Brundtland Report of 1987, World Commission on Environment and Development, WCED). From then on, important conferences and meetings have been organized by international institutions to deal with this issue, such as the Brazilian meeting at Rio de Janeiro of the United Nations for Environment and Development in 1992, which put the basis for the “Agenda 21 for culture”, which is the first document with worldwide mission that advocates establishing the groundwork of an undertaking by cities and local governments for cultural development.

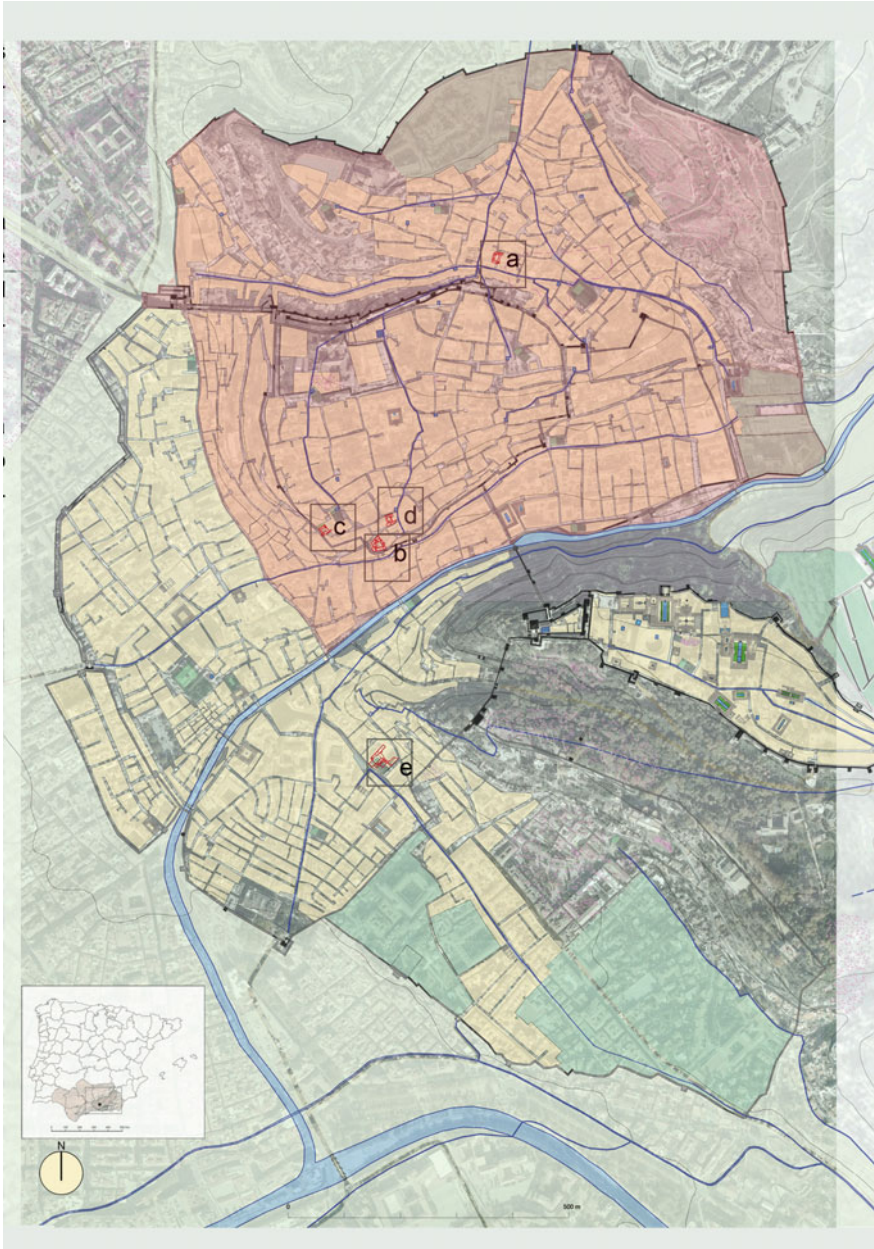
The Agenda 21 for culture was agreed by cities and local governments from all over the world to enshrine their commitment to human rights, cultural diversity, sustainability, participatory democracy and creating conditions for peace. It was approved by European Community by the 4th Forum of Local Authorities for Social Inclusion of Porto Alegre, held in Barcelona on 8 May 2004 as part of the first Universal Forum of Cultures. This agreement fosters cultural participation as vital elements of citizenship and has been followed by the Agenda 2030 for the Sustainable Development, an action program signed in September 2015 by the governments of the 193 member countries of the UN. It includes 17 Sustainable Development Goals—SDGs—in a large action program for a total of 169 ‘targets’.

## 2 Case Studies

Current conditions of historic small city centers of Southern and Central Spain were analyzed during my Ph.D. study, when I could deeply analyse ten emblematic mansions belonging to the XVI Century Granada, in Spain [24], the majority of them being situated in the historic quarter of the Albaicin. Also, this study has taken into account the main architectural expressions of greater contemporary urban areas of the Kingdom of Castile.

The historic houses of the Albaicin have been studied and surveyed in relation to the entire city modern transformation, bringing to light the delicate and complex transition of the town, from the Nasrid period to Christian times. The drawings of the original conditions of the sites, previously to the most recent renovation works many of these buildings have undergone, have been presented.

The method of this work was based on, first of all, the drawing of a precise and thorough planimetry of the ten surveyed houses, together with in situ tasks based on physical data; subsequently, a study of archival data was made, also analyzing the



**Fig. 1** General Map of XVI Century Granada, with the medieval walls (grey line), the urban fabric (yellow color), the Albaicin quarter (red color) and the productive gardens (green color). With letters a, b, c, d, e, the most important mansions of that period have been marked



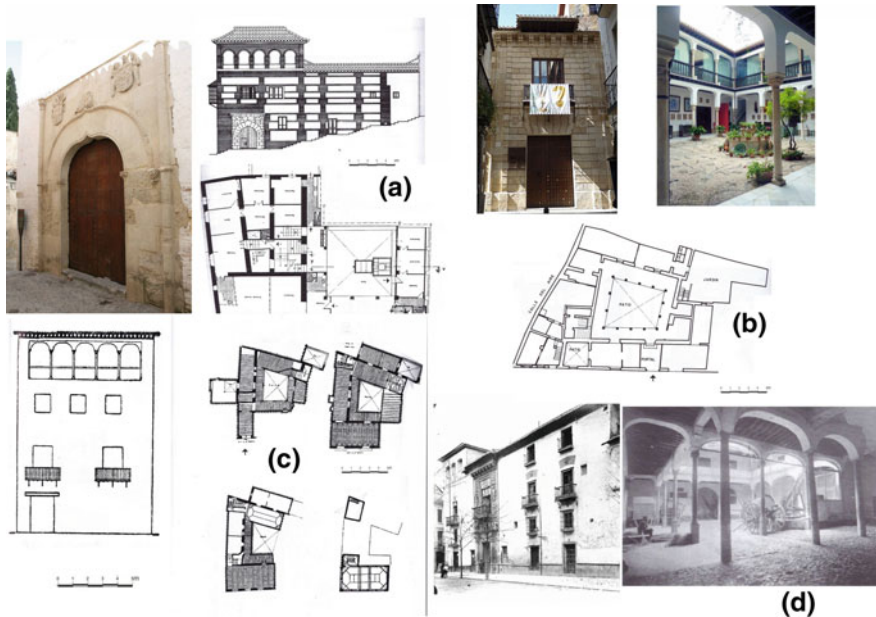
specialized existing bibliography on the subject. The integrated analysis of the buildings and their surroundings has been fruitful and could be registered on a data map created with the Geographical Information System, where also the Medieval settings, and those of later constructions, have been individualized and dated (Fig. 1).

The surveyed domestic buildings have also been compared with other similar outstanding constructions of the same period that are located in the city, which have either been preserved or disappeared. These houses, although have been demolished, were well documented and studied during the XIX and XX Centuries [25], and their study has confirmed most of the preliminary hypotheses, and have guided the reconstruction of the spatial distribution of the original architecture in the historic period discussed (Fig. 2).

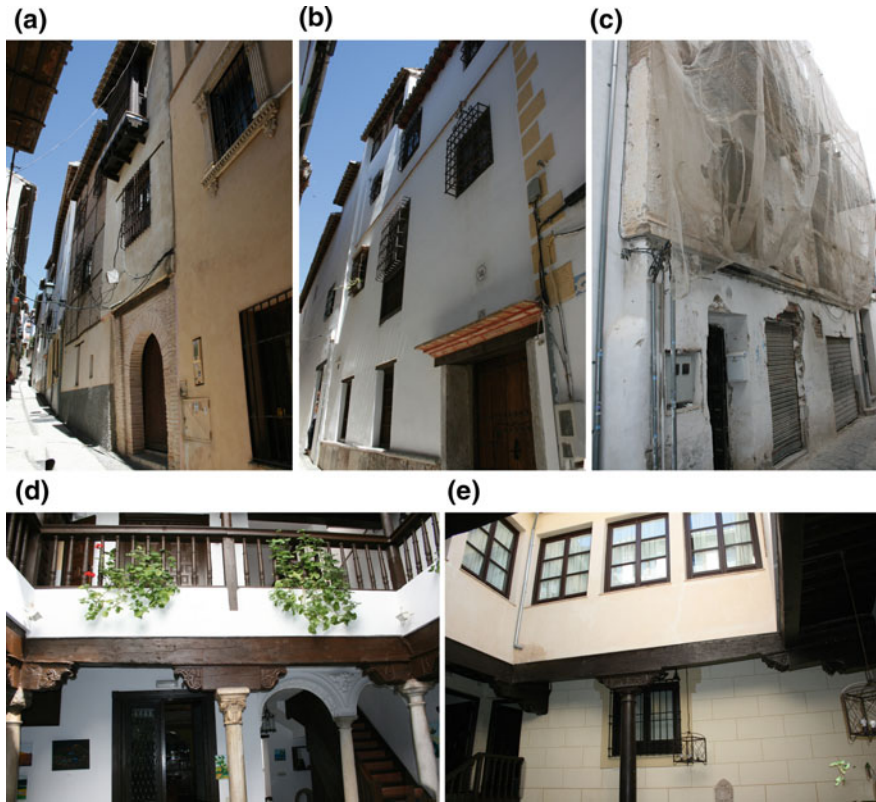
The Albaicin appears under conditions of marginality, up on a hill in front of the Alhambra, with low accessibility and inadequate infrastructure facilities.

For this reason, since the 60's of the last Century it has been progressively abandoned by local inhabitants, who moved to the part of the city downhill, and its degradation is still visible, even if the local government has tried to finance recovery plans in the last decades, opening the door to a process of gentrification.

This analysis has documented and outlined the huge loss of the character and of the original materials of housing in the historic center nowadays, after several rehabilitation works and the construction of new buildings (Fig. 3).



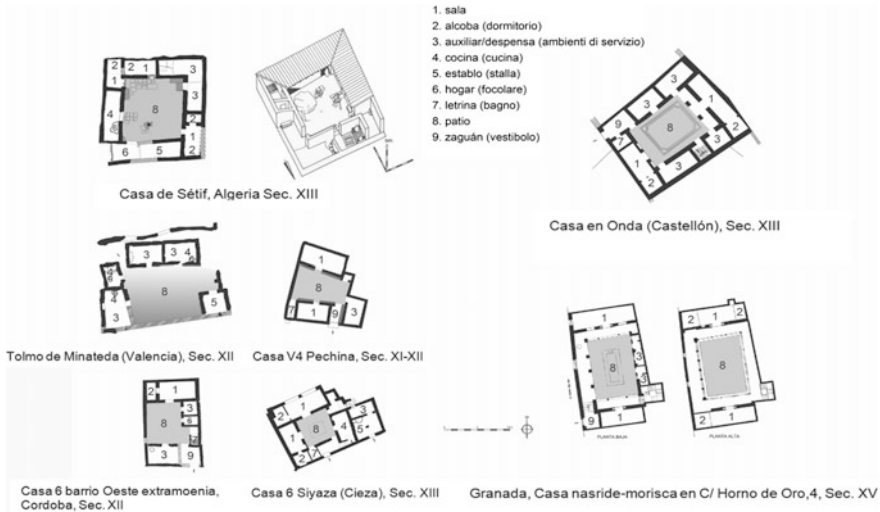
**Fig. 2** Important mansions of XVI Century, Granada. **a** Zafra House, Calle Zafra, 5; **b** Pisas House, Calle Convalecencia, 1; **c** House located in Calle S. Escolastica and demolished in the early XX Century; **d** Cordova Palace, in Calle Sierpe Alta, demolished in 1919



**Fig. 3** Examples of rehabilitation works and new constructions in XVI Century mansions in the quarter Albaicin of Granada. **a** Calle Horno de Oro, 8, which still conserves a kind of traditional wooden balcony, although the existent has been realized recently, similar to the original one. **b** Calle Horno del Oro, 12, a typical transformed facade. **c** Calle S. Juan de los Reyes, 113. Deteriorated facade of a medieval house. **d** Internal patio of a house in Cuesta de los Aceituneros, 6, in a good state of conservation, although quite modified. **e** Internal patio of the mansion located in Carrera del Darrio, 9, very modified, without the upper wooden gallery

The morphological analysis has been focused as a typological study of the existing historic buildings, with a special attention on Al-Andalus remains over which the new householders constructed or adapted their mansions. Thus, the research also dealt with some special multicultural characteristics of the constructive techniques, as well as of the society of that period. The basic type of Castilian and Andalusian houses was that organized around a central patio [26]. The hypotheses brought forward have been supported by the archaeological documentation that has been elaborated during the excavation works realized during the last three decades in the houses concerned in this study (Fig. 4).

Moreover, during this work, the more recent transformations that these historic buildings suffered over the contemporary period have been pointed out.



**Fig. 4** Analysis of the functional specializations of the medieval patio house in Andalucía and Maghreb. The pictures on the left have been extracted from: Gutierrez Lloret, S. (2012) Gramática de la casa: perspectivas de análisis arqueológico de los espacios domésticos medievales en la península Ibérica (siglos VII–XIII). *Arqueología de la Arquitectura* (9), pp. 139–164

Even nowadays its treasures are so exposed to severe deterioration that their cataloguing, documentation and appreciation as heritage are becoming crucial. The inscription of the Albaicín into the List of World Cultural Heritage by the UNESCO in 1994, was of none guarantee of its rigorous protection. The main line of interventions followed has been that of “facadism”, keeping only the front of the house, and rebuilding entirely the rest.

This kind of intervention has been denounced and criticized several times by the experts worldwide, but it hasn’t been strictly banned by the local government, and it is still being adopted [27].

Despite the fact that the ten surveyed houses are listed in the special protection plans (“*Planes Especiales de Protección*”, Albaicín Plan of 1990 and the Town Centre Plan of 2002) their formal characteristics, as well as structural and decorative historical value, have suffered and are still suffering at the moment, gradual plunders or destruction. These buildings are not classified as *BIC* (the administrative symbol for Spanish “Bien de Interés Cultural”, a category which defines national monuments), so aren’t rigorously protected and it is vital to understand the restorations errors carried out on them.

This kind of analysis has outlined the needs of the city of Granada to formulate more correct and efficient criteria for its better conservation. It has been also possible to deduce the most important priorities and guidelines, following environmental and social sustainability, for the “green” conservation of the Albaicín, under a new socioeconomic paradigm framed into “pro-common and common good”, “co-living” and “social joint responsibility” criteria.

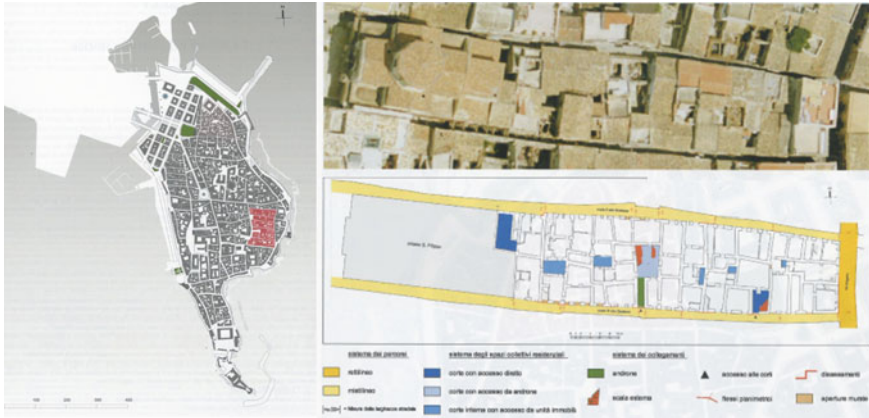
The housing developed by ancient and Castilian society in XVI century Granada still have elements consisting of historic resources, on which an innovative strategy can be grounded, especially in relation to sustainability and bioclimatic features. The internal “patios” of the houses allow to develop open spaces, which can be used for social and productive activities (exhibitions, common use spaces, events, urban kitchen gardens, etc.). This areas can be also a guarantee for a good and sustainable quality of life, more sociable, cooperative and based on the sharing economy (Fig. 5).

Therefore, the Andalusian patio houses typology can consist of a powerful resource to develop collaborative projects of urban recovery, based on participative planning. This kind of projects can be fomented and financed by crowdfunding through open source platforms, which can be based on a webgis, open online laboratories and free sharing crowdsourcing pages [28].

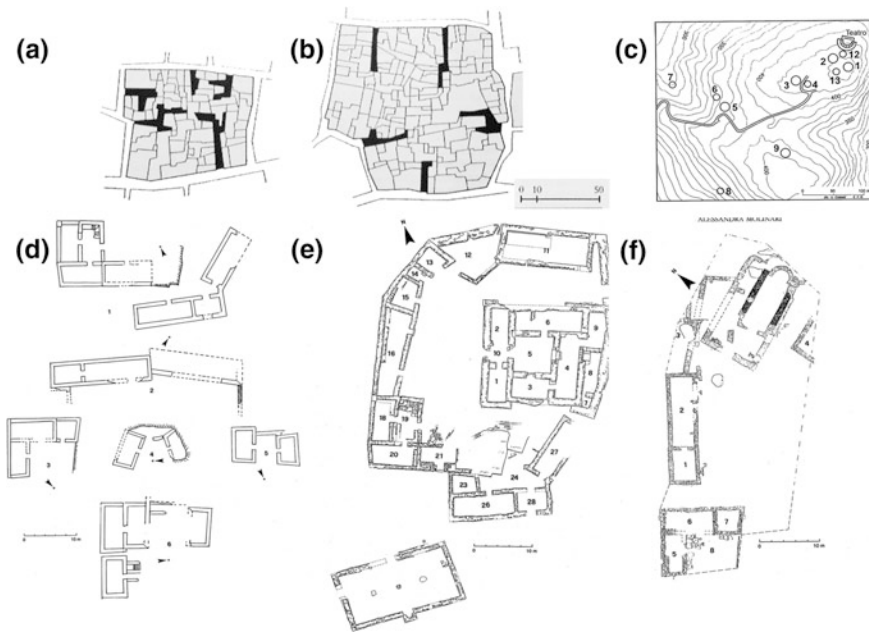
The typology of the medieval Andalusian patio house is quite similar to that with a courtyard, present in contemporary Southern and Central Italy, and partly still nowadays. This courtyard can be lateral, on one side of the ground floor, and the domestic units are organized in a line towards the main streets, following a scheme, which is very common in Central and Northern Italy, or it can be central, like in Granada and in other historic city centers and small towns centers of Andalusia (Fig. 6).



**Fig. 5** Orientation N-S and internal patios (red color) of the main mansions in XVI Century Granada



**Fig. 6** Scalora, G., Monti, G. Siracusa, Sicily. Ortigia, Giudecca quarter. Individualization of medieval courtyards (blue and cyan hues), In: Scalora, G.; Monti, G. (2010) Op. cit., pp. 76–78



**Fig. 7** Sicily. Urban pattern in Trapani (a) and Mazara (b), with narrow dead end streets (black color), from: E. Guidoni (1979) *La componente islámica nella formazione delle città italiane*. In: *Gli arabi in Italia. Cultura, contatti e tradizioni*, Milano, pp. 575–597, espec. p. 578. Segestas’ rests of medieval mansions: Monte Barbaro quarter (c); 5th zone (d); castle area (f), from: MolinarI, A. (2000) *Edilizia pubblica e privata nella Segesta medievale*. In: *Castrum 6: Maisons et espaces domestiques dans le monde méditerranéen au Moyen Age*, Collection de l’École Française de Rome, 105–6, Roma, pp. 177–197, espec. pp. 180–184

This last type is more developed in Southern Italy, or in that Central small cities where the kingdom of Frederick II, Holy Roman Emperor and King of Sicily, which was very connected with the Northern Africa and Arabic cultures, was settled during the XIII Century.

In this case the home units are distributed around this open space, being the urban development a “cluster” model, with narrow dead end streets (in Palermo still called *darbi*, similar to Spanish *adarves*). An example of this kind of urban structure still exists in the regions of Calabria, Campania, Molise, Sicily and Puglia (Fig. 7).

Peer to peer urbanism and collaborative projects can be successfully proposed in these Italian settlements, using the open spaces of courtyards as common areas for the co-living community, for example, in a similar way to what could be realized in Granada or in other similar Spanish historic centers.

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