

## Via Giostra Vecchia: architecture and urban spaces in the old center of Cosenza

### *Via Giostra Vecchia: architettura e spazi urbani nel centro antico di Cosenza*

The study on via Giostra Vecchia in the old town of Cosenza constitutes an occasion for the analysis of the city, considering both the single buildings (with their technical-constructive, formal geometrical, deterioration properties) as well as the urban space intended as the “material” of the city, able to contribute to determining its value.

The restitutions of survey we propose have the objective of presenting with evidence both the architectural features of the buildings as well as the relationship between buildings and the urban space. They are complex restitutions of survey, realized with the combination of more drawings, necessary to put together for analysis and knowledge, homogeneous data on the issues mentioned above.

*Lo studio su via Giostra Vecchia nel centro antico di Cosenza è un’occasione per analizzare la città, considerando sia i singoli edifici (con le loro caratteristiche tecnico-costruttive, formali, geometriche, di degrado, ecc.) che lo spazio urbano, inteso come “materiale” della città, in grado di contribuire a determinarne il valore.*

*Le restituzioni che proponiamo hanno l’obiettivo di presentare con evidenza sia le caratteristiche costruttive degli edifici che il rapporto tra edifici e spazio urbano. Si tratta di restituzioni complesse, realizzate con l’accostamento di più elaborati, necessarie per comporre insieme, ai fini dell’analisi e della conoscenza, dati omogenei tra loro sui temi sopra indicati.*



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**Keywords:** survey, urban space, complex figurative devices

**Parole chiave:** rilievo, spazio urbano, dispositivi figurativi complessi

This study [1] on via Giostra Vecchia, in the old center of Cosenza, is an occasion to take into consideration both single buildings, with their architectural and technical-constructive peculiarities, as well as the urban spaces with which the same buildings coordinate. It is an occasion to underline how the urban space, as well as the architectures realised, is a true and genuine “material” of the city, capable of determining value and recognisability, and also capable of usefully contributing to restoration, protection or valorisation interventions. The free space of streets and squares – more in general of all the spaces, small squares, porticos etc., available for public and semi-public use – not as a solely functional component of the city or, even worse, as a residual of constructive operations, but as a true and genuine protagonist of the urban scene, which in the shapes of “emptiness” and in the materials used to create them, clear motives of recognisability. There are different reasons for new constructions on via Giostra Vecchia, but the easiest to imagine are probably those of vicinity to the citizen center, the availability of free areas for building and the contained stratification both in terms of construction and ownership (few families, with bonds of kinship between them, owners of houses and free land for new constructions). The most up-to-date urban theories and the achievements of the major Italian cities are evidently known in the most evolved environments of Cosenza society and, if it is inappropriate to attribute to Via Giostra Vecchia a value of excellence, it is not possible to fail to recognize the novelty of the proposal, which is entirely new in Cosenza, centered on the reiteration of the building block, shaped on the size of the noble buildings. The street we are talking about (with the houses, the blocks and the urban void it encloses) does not have the characteristics recommended by Renaissance treaties and its width is not, as Leonardo indicated, as “*the universal height of the houses*”. It does not even follow the instances of urban renewal which were proposed by Alfonso II of Aragon to Naples – a reference city for Cosenza – that is to say “*extend the main roads of the city in a straight line*” to make “*the neatest and cleanest city (...) of Europe*” [2]. Via Giostra Vecchia develops progressively with small adjustments along the road axis and with transformation interventions, even radical, on the building volumes (see, for example, the Caselli-Vaccaro Palace,

completely transformed during the XVIII century). However, it appears to be important to start analyzing the city from similar components – from the placement of the constructions, with their constructive peculiarities and from the urban emptiness – because it is on these that it is possible to identify the distinctive features of the urban aggregate. Distinctive features to be considered, as we believe, in each restoration or valorisation work on old centers.

#### THE TECHNICAL-CONSTRUCTIVE CHARACTERISTICS AND THE URBAN DETERMINANTS OF VIA GIOSTRA VECCHIA

Just as with the Via Giulia in Rome in the early 16th century or the Strada Nuova in Genova in the mid-16th century [3], freely indicating the first urban actuations that come to mind, also in Cosenza between the 16th and 17th century, the idea of building a “new” road emerged, capable of proposing modes of city development that different from those used during that period.

The reference to Rome and Genova is clearly a pretext; the economic dimension of the works changes as does the quality of the results. That which remains, however, is the idea of a new way of imagining urban development and seeking to create it.

Via Giostra Vecchia runs half way up the Pancrazio hill upon which the entire old center of Cosenza extends. It develops with an irregular pattern in an intermediary area between Corso Telesio, main axis of the city and the steep areas below the castle (Fig. 1).

In 16th century notarial acts and the 18th century revenue registers we find recurring indications of *cose palaziate* to identify a type of construction for the middle-high class or the noble families formed by a compact building, subsequently subdivided within into multiple units.

In the “Angelica Map” [4], an anonymous view of Cosenza at the end of the 16th century, the palatial houses are delineated with greater accuracy (presence of entrance door, architectural details, loggias, etc.), almost as if to highlight them compared to the others (Fig. 2).

For the part of our interest, though with difficulties due to the type of projection and size of the drawing, the Angelica Map [5] presents the house of the Falvo fa-

mily (then joined with those of the Greco and Garredi families), the house today known as the Grisolia Palace (formerly of the Dattilo family), that of the Perris family close to the family chapel of the Dattilo family and the home of the Bombini family.

The realization of new buildings generally uses technical-constructive references that are consolidated by local tradition, while urban space, conditioned by pre-existence and the site’s orography, follows simple development practices, with irregular patterns, minimal detachments and a road width which with difficulty reaches half the height of the buildings on the perimeter. On the constructive features of the buildings in via Giostra Vecchia and the urban spaces that it contains, there are no reliable studies nor scientifically conducted surveys [6]. The manuals for the recovery of 1980s and the early 1990s – with the consequent culture of restoration and conservation that they promoted – did not produce any specific deepening; in Cosenza, that is, the “*substance of the old centers, in fact and in law an essential part of the national cultural heritage*” [7] remains substantially without those “Scientific defences” capable of asserting new attentions both with regard to local construction practices and techniques for conservation and restoration of old constructions.

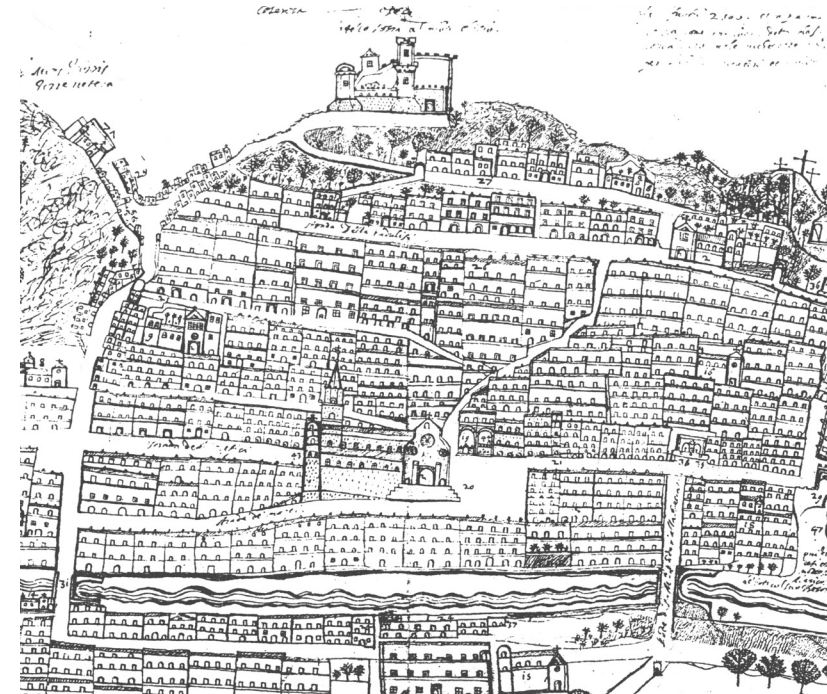
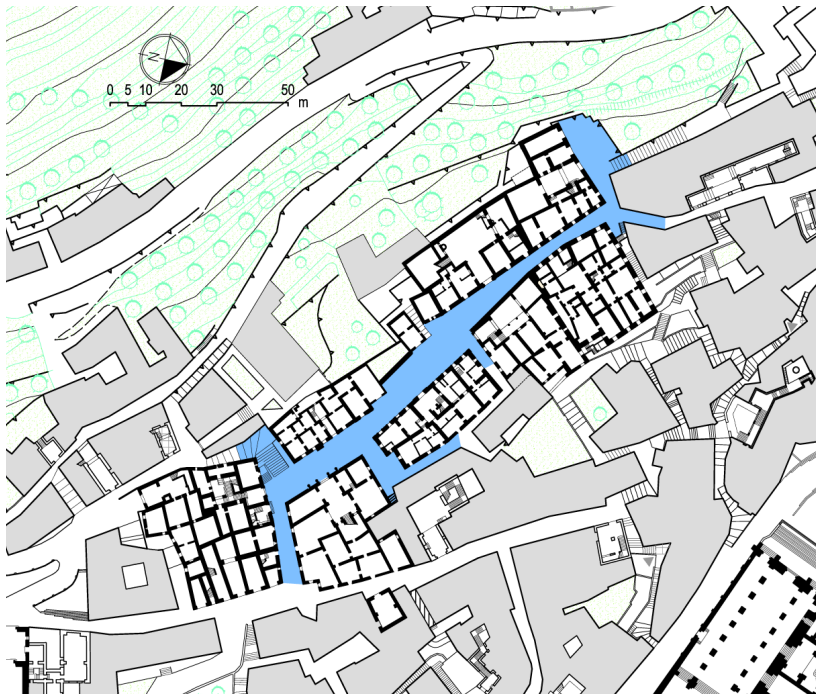
We, evidently, refer to that conservation culture which considers restoration as the search for architectural and construction solutions that are compatible with traditional ones and not just a simple application of general rules which may be philologically correct, but far from the reality of the architectural and urban works to be valorised; that is to say, a conservation culture which only after having considered old architecture as a while – as the result of form, constructive properties, functions, urban environment etc. – arrives at remedying the state of decay in which it is found (Fig. 3-4).

Parenthetically, besides the dissemination of recovery manuals, we also recall the suggestions and the consequent criticisms by the Italian architectural culture (such as M. Tafuri, 1991) for an exercise of restoration that is more attentive to the heritage of constructive forms and techniques of the past and contrary to replacement operations of all or almost all internal elements of buildings (floors, roofs, stairs, fixtures, etc.); Substitution that transforms ancient architecture into an “*empty shell*”, authentic only externally.

In the abovementioned recovery manuals, in addition to the wealth of surveys and knowledge about the “substance” of the cities – or about the structure of the buildings and their aggregation methods with those that are and their methods of aggregation with the conterminals – perhaps the most innovative concept that emerges is that of considering old architecture as the result of successive transformations and at the same time as a formidable deposit of knowledge and constructive solutions able to continue, if properly upgraded, their function. In the recovery manual of Rome, for example, it can be read that the objective is that of “creating a project culture which is capable of

including the intertwining between architectural disposition and structural organization in historic buildings, and to revamp its principles” [8]. Each manual [9], it could not be otherwise, refers to clearly identified buildings (or sets of buildings) and the solutions that they propose apply only to these and not to others. In these manuals, the surveys and graphic renderings constitute a central phase of the study, which allows “to avoid typological genericity, to illustrate, instead, identified case” [10]. Antonino Giuffrè, to whose intelligence and competence are due the researches on wall structures in all the manuals for recovery from those years, speaks of the

survey as the first necessary document for “the mechanical analysis of the building to be ensured with respect to seismic action” [11]. By overcoming here, any controversy between the different theories and figures that, differently, intervene in restoration (conservation, valorisation, etc.), it appears to be still important to remember this type of manual for the merit of having deepened knowledge of the architectural techniques of the past and read the same architecture of the past as a coherent complex of constructive and formal characters together; furthermore, in the *recovery manual*, the most appropriate “tool” to know it and enhance it.



1. Via Giostra Vecchia in Cosenza, urban insertion; planimetry with the plans of the ground floors and built constructions.

2. Angelica Map, anonymous view of Cosenza of the 16th century (detail); for the part that interests us, even if with difficulty due to the type of projection and the size of the drawing, the Angelica Map presents: the house of the Falvo family (then joined to those of the Greco and Garredi families), that known today as the Grisolia Palace (formerly Dattilo family), that of the Perris family nearby the Dattilo family chapel and the house of the Bombini family.



Based on similar research [12], we started the study on Via Giostra Vecchia, considering both the technical-constructive features of the buildings and the determinants of the urban void. For the first, synthetically, let us remember that the local tradition uses:

- Masonry in river pebbles, often with brickwork every 80-100 cm; the thickness on the ground floor is usually greater than that indicated in the best-known treatises on the Art of Building. Following the 1854 and 1870

earthquakes, there are several masonry buttresses, and some iron bars (chains) are inserted to improve the anchoring of the walls, the connection between the floor and the wall, to protect against out of plumb, to counter the thrust of arches, roofs, etc.

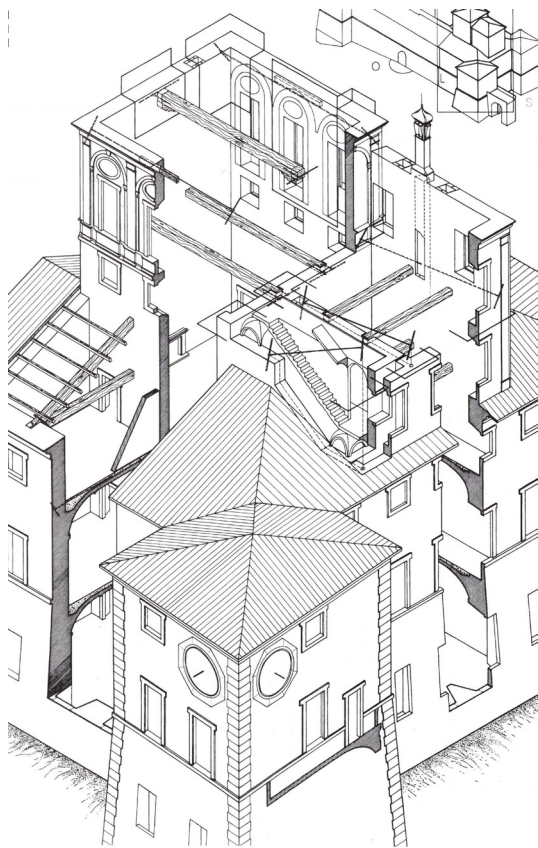
- Brick relieving arches above all or almost all the openings (doors and windows); rarely does the use of a keystone appear.
- Wooden floors not anchored to the supporting ma-

sonry. Iron chains, as recalled, are used after the earthquakes of 1854 and 1870.

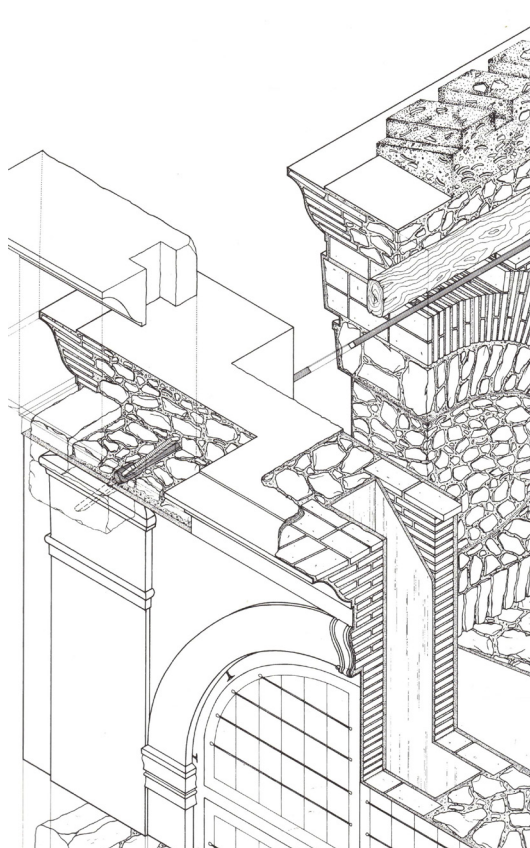
- Balconies and cornices barely jutting (about 60 cm). In both cases, the use of iron joists is, almost always, after the abovementioned seismic events.

- Wooden roofs are often without decks. Wooden trusses are used in the cases of greater prestige (important palaces, reception rooms, etc.).

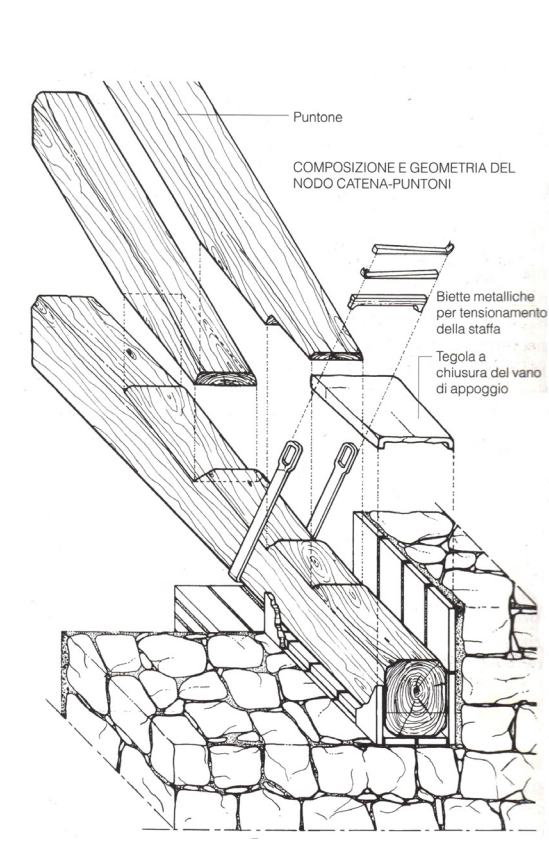
In relation to the urban theme, we recall that the ir-



3. Recovery manual of the Commune of Rome; Chigi Palace in Ariccia, axonometry of the volumes (detail).



4a. Recovery manual of the Commune of Rome, Chigi Palace in Ariccia, axonometry of the walls.



4b. Recovery manual of the Commune of Rome, Chigi Palace in Ariccia, constructive detail of the three king-posts truss.

regularity of the track of via Giostra Vecchia does not facilitate the use of recognisable geometries (axiality, parallelisms and/or volume symmetries, etc.) and the most evident urban determinants [13] can be summarised thus:

- In the presence of small widenings of head that, in addition to solving functional problems, offer the possibility of a break in the continuity of constructions, allowing perceptual appreciation of the compositional characters of the perimeter architectures and of those along the road axis (volumetric effects, presence of overhangs, differing heights, etc.).

- In the use of river pebbles both for street paving and for that of the courtyard within the buildings, in this case put into place in geometric patterns. The same material used for the public space and for the semi-public space – which thus becomes an integral part of the urban spatiality – almost as if witnessing not an interruption but rather a continuity of use between the two types of spaces.

#### DRAWINGS FOR ARCHITECTURAL AND CONSTRUCTIONAL KNOWLEDGE OF THE BUILDINGS OF VIA GIOSTRA VECCHIA

The first drawings that we present regard the elevations and the reconstruction of all the ground floors [14] of the buildings on two street fronts of via Giostra Vecchia (Fig. 5); they are drawings that give us both the dimensions in plan and elevation as well as the formal and typological organisation of the buildings studied. The elevations show architecturally homogenous volumes, generally symmetrical compared to the entrance doorway (often of local stone), with an average height of three floors. The reading of the plan, instead, highlights at least three orders of considerations:

- The first, is relative to the functional organisation of the same buildings, which normally uses internal courtyards both for direct access to housing and to stairs for the upper floors.

- The second regards the use, mentioned previously, of the courtyards as elements of mediation between the public space and the private space, or rather as elements that allow buildings to have explicit relations with urban spatiality. In this regard, let us remember that in the past the entrance doors were open much of the day and that works of common interest were car-

ried out in all the courtyards. The post-unitary urban cadastre of 1873 indicates the courtyards as pertinences of the palaces, but outlining them with the same graphic signs and the same colour as the public roads.

- The third, is relative to the gradual process of aggregation – which started in the mid-1700s and continued until the second half of the 1800s – which transformed the pre-existing housing units into new, architecturally and constructively homogeneous building. A process of aggregation [15], in part are still legible, which develops according to a dual intervention mode: that which simply adapts, with limited modifications, the existing structures to the new functions and that more radical which completely transforms the original type of building to adapt it to the requirements of the client (presence of courtyards and bodies medium sized stairwells, regularity in internal distribution, large reception rooms, etc.).

These drawings are followed by those on the knowledge of the single buildings both from the viewpoint of the “quality” of the masonry structure as well as the urban role that they play: the first regard the construction materials present within the masonry and the surface state of the plaster; the information is from thermographical acquisitions (two examples are shown in figure 6) and from direct inspections. Based on all the collected data (dimensions of walls, materials used and installation mode, presence of premodern anti-seismic systems, etc.), we also produced drawings on the collapse of façades subjected to earthquakes.

The drawings on the urban space isolate some significant data of the fabric of via Giostra Vecchia (relationship between full and empty and between street width and elevation heights, architectural continuity/discontinuity, elements of passage between public and private, etc.) in order to verify homogeneity and recognisability.

These two groups of drawings conclude with synthesis plates formed by several drawings, which bear witness not only to complexity (formal, constructive, spatial, etc.) of the works under investigation, but also of the plurality of attention necessary to know them and to intervene for restoration or enhancement aims.

For the aims of this article, we propose some of the drawings listed hereafter, with the aim of summarising investigation opportunities and knowledge that survey can offer:

- In the axonometric section of the Bombini palace (Fig. 7) the sequence of structural elements and the materials used is legible. It is a partial drawing, but sufficient – in our belief – to make the technical-constructive characters of the object being investigated known. Wooden floors simply lean against the masonry, while the roof is devoid of pushing elements. As stated, the iron chains – insufficient to protect from the collapse of the façades and for a suitable securing of the entire construction – date back to consolidation work carried out after the earthquakes of the second half of the 1800s.

- Figure 8 reports the overturning safety levels [16] of the masonry panels of the main façade of the Falvo palace (Greco-Garredi), overlooking via Biagio Miraglia, sole vehicle road link between via Gaetano Argento and via Giostra Vecchia. The security level  $\eta$  is given by “the ratio between the local limit acceleration – which impressed to the masses determines the collapse – and the value of required capacity deriving from the regulations, from the degree of protection and from the expected life value to be assigned to the artefact, as well as a structural analysis which is indispensable to correlate the ground acceleration with the local acceleration at the height of the top floor” [17]. Verification of the façade [18] subject to earthquake (according to Ordinance 3274 of 2005) highlights how similar structures are almost stable at the base and that their tendency to collapse always increases more on the upper floors. It is, however, advisable to provide structural interventions (chains, floor anchoring, masonry consolidation/reinforcement, etc.) to increase the security level of the façade, especially on the upper floors – from the second floor up – and, in some cases, also on the ground floor (see table in figure 8).

- The drawing on the surface deterioration of the main elevation of the Grisolia palace (Fig. 9) shows the state of abandonment which the building experiences and the lack of periodic maintenance. There does not appear to be damage due to traumatic events (for example, there are no passing lesions, nor are their lesions due to earthquakes), but only deteriorations deriving from a slow and progressive carelessness by who, over time, were responsible for it.

The thermographical investigation reveals the presence of wooden architraves above all the windows of the first and second floor, but no relieving arch; the river pebble masonry presents medium quality masonry



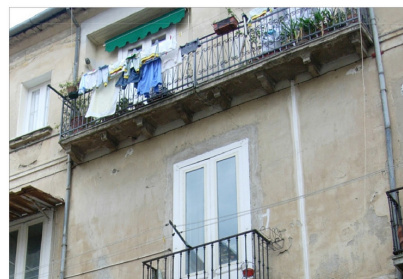
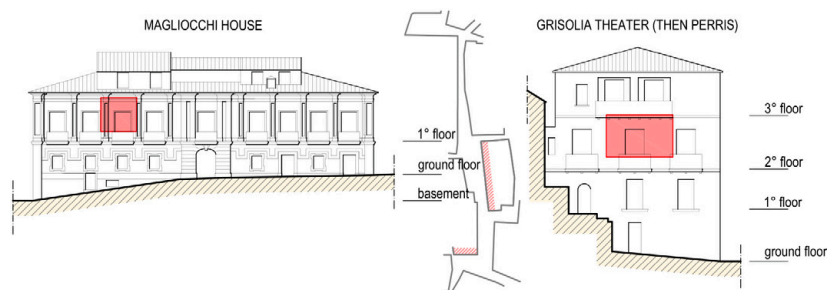
5. Plans and elevations of set of buildings in via Giostra Vecchia in Cosenza.



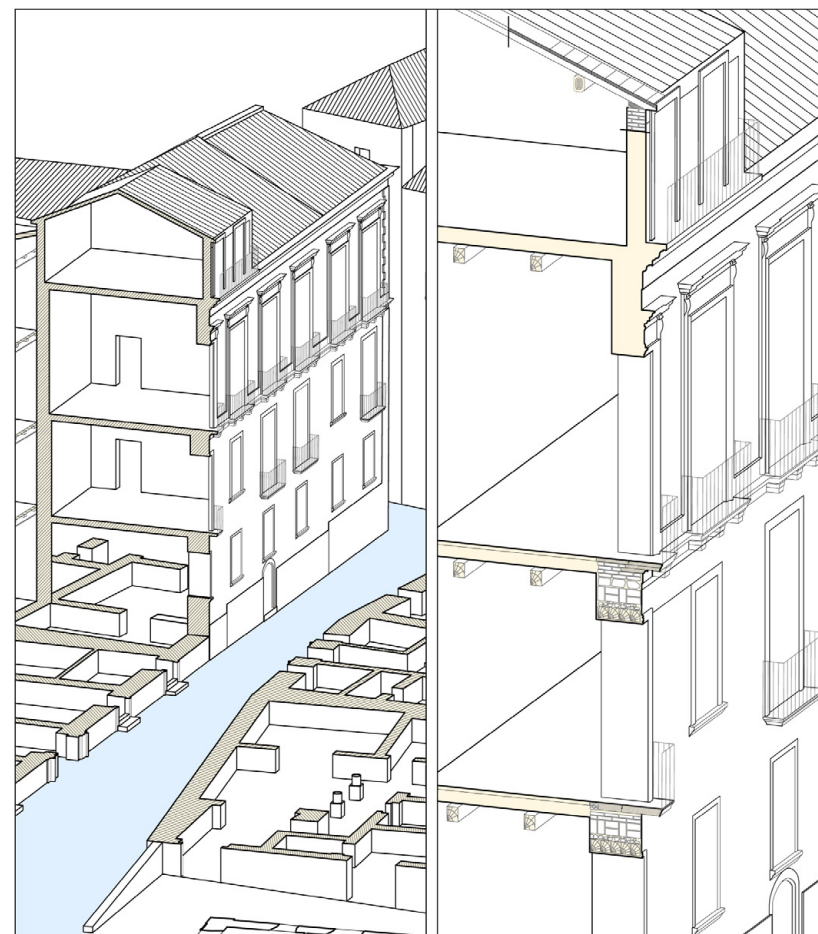
equipment (with installation and sufficient/fair quality pebble meshing); the holes of the scaffolding used during the construction phase are evident; there are no openings that have been successively closed, or rather the elevations seems to have been made in a unitary manner.

- The drawings on the urban space (Fig. 10) present via Giostra Vecchia as a road which, as stated, is affected by the irregularities imposed by both the orography and the pre-existing buildings; new works, in fact, transform – in some cases completely – the interior and exterior of the buildings, but they cannot change

the path that results as having a relation between the width of the road and the height of buildings between 03 and about 1. The sequence of profiles between the volumes on both sides of the road confirms the aforementioned values, with insufficient sunshine on the ground floors.



6. Thermographical investigation of Magliocchi House and Grisolia Theater; in the first façade, the investigation points out: masonry made of river pebbles with brickwork and stone blocks, on the ground floor and river pebbles with brickwork on the first floor; putlog holes set at regular intervals; brick relieving arches and wooden elements. The investigation of Grisolia Theater highlights: the reconfiguration of the façade (ground and first floor); river pebbles masonry and putlog holes; brick relieving arches and wooden architraves.



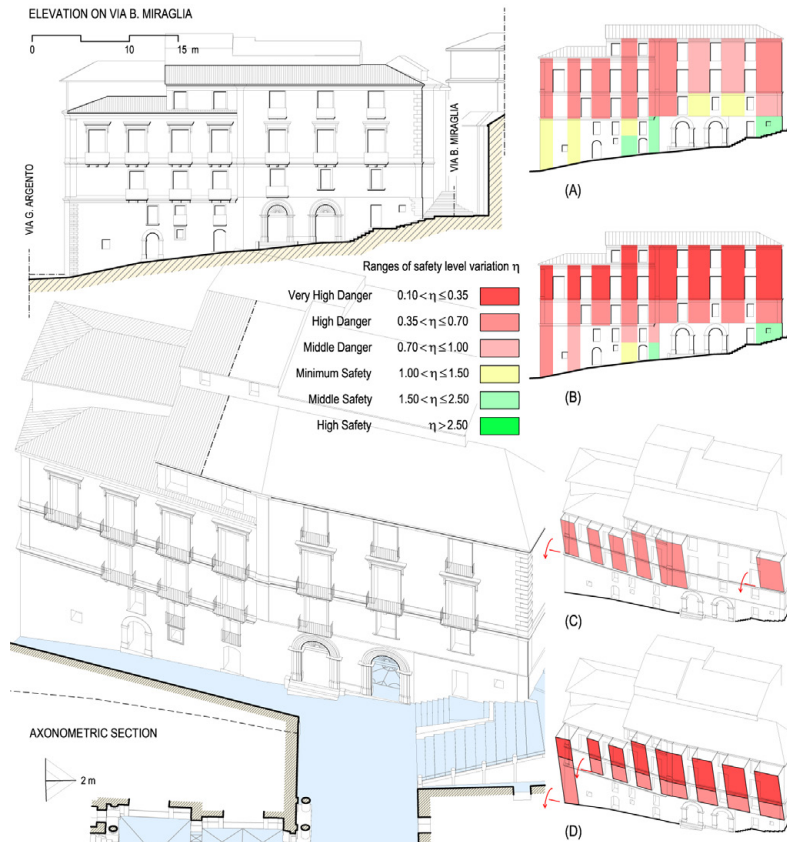
7. Axonometric section of Bombini Palace in via Giostra Vecchia in Cosenza with the sequence of structural elements and of the construction materials used.

The continuity of spaces between the street and the courtyards of the buildings is given, mainly, by the use of the same material for the paving. In some cases, (cfr. the palaces of the Grisolia and Falvo families) the geometrical weaving of the river pebbles is still visible (Fig. 11).

- The synthesis plate on of the Grisolia palace (Fig. 12) bring together different types of information (on the architectural form, constructive characteristics, the continuity of spaces, etc.) to coordinate between

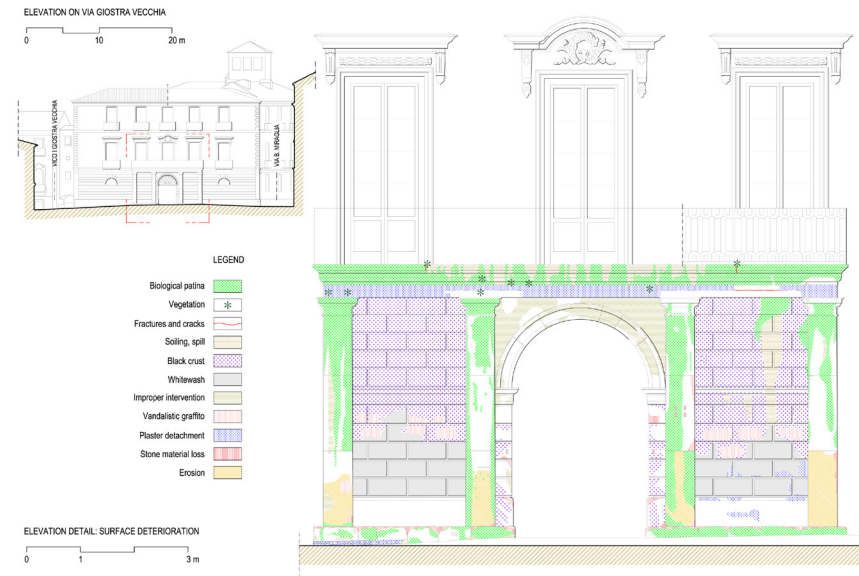
them in order to consider architecture as a system, an organisation of elements, or as a “*structure comprising form and contents like two pages of the one sheet, sheet with its physical structure, then, technological, one supporting the other (...); but it is also possible and necessary to consider a building as one of the units (...) constituting a greater work in the urban context in which it belongs*” [19]. A plate, therefore, is capable of rendering not only ritual information through conventional drawings, but a figurative context of

evidence between the different architectural components, useful in forming strategies both of analysis and of intervention; or even a figurative context capable of bringing out the logical and formal links between the components object of investigation and between these and the building and urban whole (in the example we propose there is both a form/technical constructive relation as well as continuity between the public space of the road and the semi-public space of the internal courtyard of the Grisolia palace).



8. Falvo Palace (Greco-Garredi), verification of the stability of the façade subjected to earthquake; safety levels of the wall panels of the main front, in relation to DM 16-1-'96 (A) and Ordinance 3274 of 2005 (B); exemplification of wall panels overturning with safety level  $\eta$  corresponding to high ad very high danger, in relation to DM 16-1-'96 (C) and Ordinance 3274 of 2005 (D).

9. Grisolia Palace on via Giostra Vecchia in Cosenza, drawing on the surface deterioration of the façade.





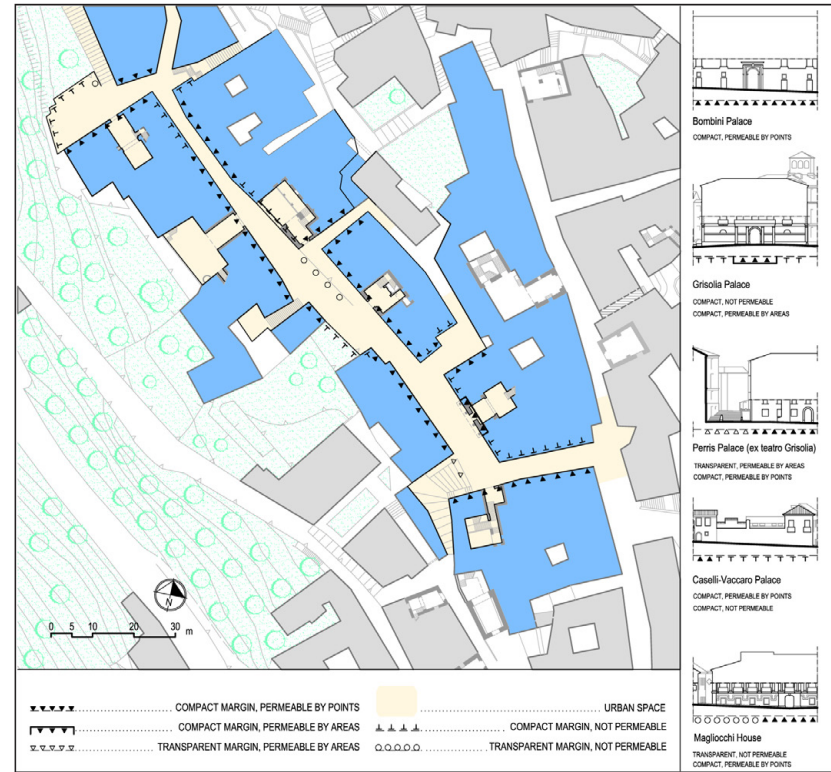
The complementarity of more images in a plate – let us remember – allows for the evolution of architectural knowledge for the direct reference between one piece of information and another (from the information contained in the single drawings) and for the reformulation of information that each drawing necessarily brings (diversity of scalar relations, graphic techniques, selection/emphasis of signs, etc.). Considering the figurative articulation (projective, graphic, etc.) as this type of drawing has the main objective of highlighting the relationships between the different components and provide additional elements of knowledge to circumscribe the design motivations of the architecture

in question; motivations that are given for comparison in one drawing – or, more generally, in the same figurative context – of different designs. It is akin to saying that – apart from the explicit content that each single piece presents – new content is said to be due to the closeness of more drawings and the cognitive formulation proposed by the same synthesis tables. Similar plates, we repeat, seek to interpret the meaning of a work in its entirety – as the result of form, constructive and spatial characteristics – and to this end, almost force us to see and to read the work being studied following the modes of graphic restitution and the suggestions which each synthesis drawing presents. In our

opinion, it is a necessary condition to interpret a work, disarticulating the elements and reading them both in detail and as part of a whole. They do not simply the forms of architecture, but entirely define the possibilities we have for analysing it and knowing it.

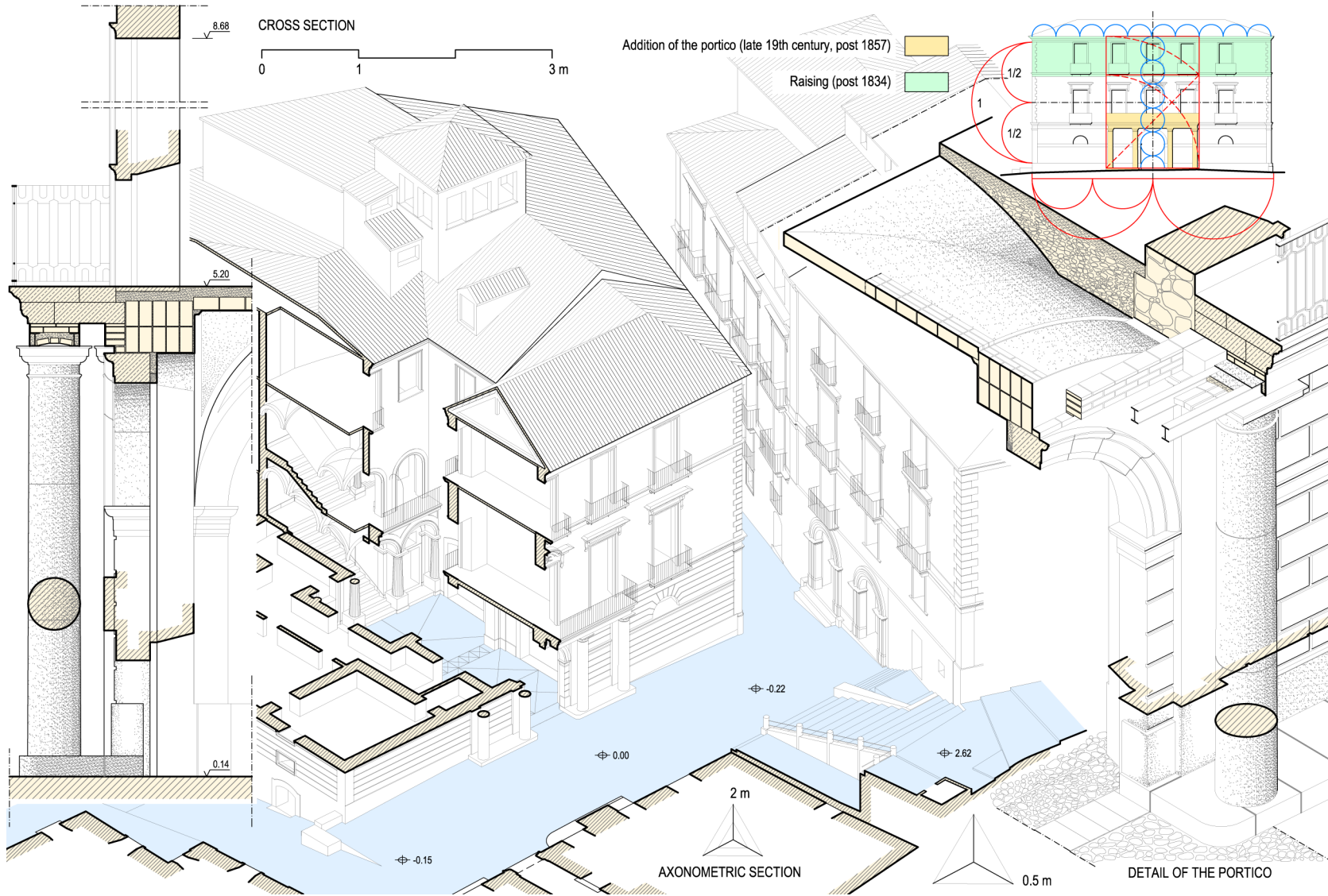
### CONCLUSIONS

The examples that we have presented – and others that can be elaborated – render surveying a necessary discipline in the general analysis of architecture and for the definition of a repertoire of drawings dedicated to the knowledge of the formal, constructive and, in



10. Via Giostra Vecchia in Cosenza, drawings on the urban space.

11. Via Giostra Vecchia in Cosenza, drawings on the urban space.



12. Grisolia Palace in via Giostra Vecchia in Cosenza; synthesis plate on constructive, architectural and urban characters. With similar drawings, it is possible to make references between different drawings emerge and consider the architecture as a coordinated system of forms, structures and spaces.



particular, spatial characteristics. This makes surveying a discipline capable of dialoguing with others in order to safeguard and valorise the architectural heritage of our old centers.

Attitudes of acquiring information and returning them to representations – 2D and 3D models, high definition realistic images, schemas, etc. – on the different aspects of the analysis allow the discipline to evolve knowledge not on the basis of figures that more or less resemble the building being studied, but rather of data and elaborations dedicated to the individual contents of the old architecture to which, as indicated, are added the synthesis plates that have the goal of considering architecture as a “*structure in the sense that each space and every member thereof has to be in close relationship with all the others and the others with the whole*” [20]. That is to say, an organic entity, which through single themed drawings would not be able to express itself in order to fully address valorisation or restoration works.

## NOTES

[1] The present article reconsiders, with new reflections and new drawings, a survey experience of 2004-05, including surveys, renderings and archival research on single building and on the urban space of a meaningful part of via Giostra Vecchia; Furthermore, it included the creation of a GIS.

[2] Cfr. Letter from the Neapolitan cardinal Pietro Summonte (1524) in Bertelli, Briganti & Giuliano, 1986, p. 364.

[3] Cfr. Vagnetti, 1967; Salerno, Spezzaferro & Tafuri, 1975.

[4] The view of Cosenza (48x77 cm),

known as the Angelica Map, is held at the Angelica Library in Rome (print counter, n. 56); cfr. De Marco, 1992.

[5] For greater details on the evolution of the buildings in via Giostra Vecchia and, more generally, of the old center of Cosenza cfr. Rubino & Teti, 1997; Canonaco, 2007.

[6] Our surveys of 2004-2005 are the first, conducted with scientific methods (total station, photogrammetry, etc.), extended to all the accessible parts of a part of the city.

[7] Panella, 1992, p. 9. On the same topics cfr. Muratori, 1963.

[8] Giovanetti, 1997, p. 15.

[9] Cfr. Giovanetti 1992; Giuffrè, 1993; Giovanetti, 1997.

[10] Giovanetti, 1997, p. 19.

[11] Giuffrè, 1997, p. 59.

[12] On the reading and the evaluation of constructive characteristics of building, to the list of already indicated manuals, that of the Region of Umbria, *Regolamento regionale del 15 luglio 2003*, is added.

[13] For the first references on the themes of urban space cfr. the studies by De Carlo, 2014; Pierluisi, 2012; Barbiani, 1992; Krier, 1982; Aymonino, 1977; Cullen, 1961.

[14] The reconstruction of the ground floors of the buildings is done based on cadastral maps verified with reconnaissance and, where possible, with direct measurements.

[15] The Falvo Palace derives from the merging of the Greco, Falvo and Garredi properties, completed around 1770. The Grisolia Palace (formerly Dattilo family in the mid-17th century) becomes property of the Grisolia family only in the 19th century. The Grisolia Theater (then Perris) is a construction of the second half of the 19th century, transformed during works into a building for inhabitation. The Caselli-Vaccaro building of the second half of the 16th century, is completely transformed in the 18th and 19th centuries. The nucleus of Bombini Palace (previously Firrao, then Telesio), consists of two adjoining houses, it of the first half of the 17th century and would be transformed in the mid-1800s.

[16] Verification of the overturning was carried out by Nicola Totaro – Retired Professor of Structural En-

gineering and Structural Rehabilitation at the Faculty of Engineering of UNICAL – on the basis of current regulations (DM of 16/01/1966 and Order 3274 Of 2005) and its long experience in the construction of the ancient buildings, both in stone and masonry.

[17] The citation was taken from an unpublished report by Prof. N. Totaro, written on occasion of the study which started in 2004-2005.

[18] The construction techniques used are the same for all the buildings in via Giostra Vecchia.

[19] Quaroni, 1977, p. 53.

[20] Ibid.

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